School to Work
CREATING FUTURE PATHWAYS

Vocational Learning in **Technology**

NEW SOUTH WALES
DEPARTMENT
OF EDUCATION
AND TRAINING

Vocational Education in Schools Directorate

Vocational Learning in Technology

"When students leave school, they should have employment related skills and an understanding of the work environment, career options and pathways as a foundation for, and positive attitudes towards, vocational education and training, further education, employment and life-long learning".

Adelaide Declaration on National Goals for Schooling in the Twenty-First Century (1999)

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Contents

1 Vocational and Enterprise Learning in Technology

1.1 Introduction 1
1.2 *School to Work: Creating Future Pathways 2005-2007* 1
1.3 Enterprise learning in Technology 2
1.4 Quality teaching in NSW public schools 3
1.5 Assessment for learning 3
1.6 Vocational learning syllabus links in the Technology curriculum 3
1.6.1 *Work, Employment and Enterprise* in the Technology Years 7-10 syllabus 3
1.6.2 *Key Competencies* in the Technology Years 7-10 syllabus 4
1.6.3 *Key Competencies* in the Technology Stage 6 syllabus 4
1.6.4 Vocational learning outcomes in Technology Stage 6 5

2 Employment Related Skills in the Classroom

2.1 Employment related skills 7
2.1.1 Identifying employment related skills – a questionnaire for teachers 8
2.1.2 Examples of employment related skills developed in Technology Stages 4, 5 and 6 9
2.1.3 Sample unit of work annotated with employment related skills 10
2.2 *The Employment Related Skills Logbook* 13
2.2.1 Why use the logbook? 13
2.2.2 What's new in the 2005 logbook? 14
2.2.3 *The Employment Related Skills Logbook* overview 15
2.2.4 Models of logbook implementation in schools 21
2.2.5 Teacher examples: Logging employment related skills in the classroom 22
2.2.6 Teacher activity: Logging employment related skills in the classroom 37

3 Student Vocational Learning Activities

3.1 Technology student activities 39
3.1.1 Education and Training Pathways 40
3.1.2 Education and Training Pathways for a career relating to Technology 41
3.1.3 Careers research using technology 42
3.1.4 Careers in IT 43
3.1.5 Food, Hospitality and Tourism 44
3.1.6 A Technology career pathway 45
3.1.7 Looking at your own career 47
3.1.8 Australian designers at work 48
3.2 Technology teaching unit: Good Food, Good Times 49

4 Education and Training Pathways in Technology

4.1 Credit transfer arrangements 55
4.1.1 Credit transfer arrangements: HSC to TAFE NSW 55
4.1.2 HSC Technology courses and credit transfer arrangements 55
4.1.3 *School Statement of Achievement* forms 59
4.1.4 Credit transfer from TAFE NSW to university 60
4.2 Traineeships and apprenticeships 61
4.2.1 School Based Traineeships in NSW schools 62

5 Vocational and Enterprise Learning Resources

5.1 Employment related skills and their elements 63
5.1.1 Employment related skills mapping 69
5.2 Vocational learning resources for teachers and students 70
5.2.1 *myfuture.edu.au* 74
5.2.2 *The Real Game Series* 75
5.2.3 *Links to ReCaP* 76
5.3 Enterprise resources and activities 77
5.4 *Teachers in Business* – an opportunity for teachers 79

1. Vocational and Enterprise Learning in Technology

"Career building skills should not be taught as a separate subject but should be integrated with other curriculum subjects, such as maths, history ... Why are we learning these subjects if not to prepare for the rest of life? Let's put a context around these subject areas that adds greatly to the learning experience."

Phil Jarvis (2002)
Vice-President, Canadian Work/Life Centre

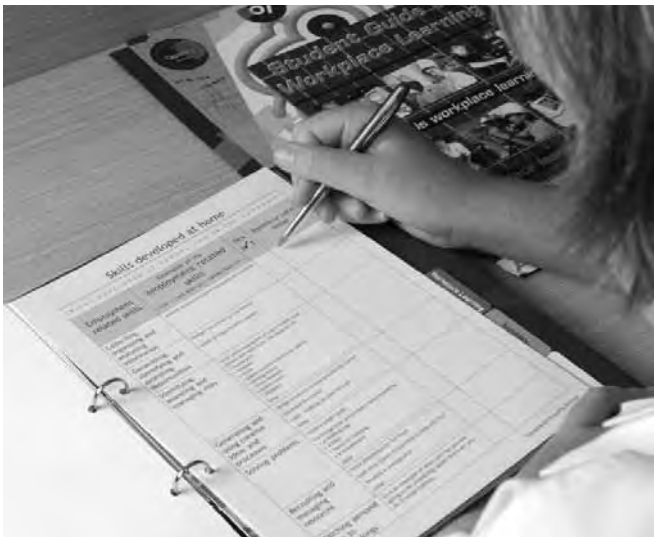
1.1 Introduction

Vocational learning is learning that addresses broad understandings of the world of work and develops in young people a range of knowledge, skills, competencies and attributes relevant to a wide range of work environments. Vocational learning provides students with the opportunity to make connections between school and the world beyond it.

Vocational Learning in Technology is a curriculum support tool for secondary school teachers within the Technology key learning area. This resource supports teachers in implementing Technology syllabuses to identify and provide a range of opportunities for students to articulate the relevance of their curriculum learning to personal growth and future careers.

Vocational Learning in Technology also provides teachers with information and teaching strategies to support the implementation of the *Employment Related Skills Logbook*.

This booklet updates the existing *Vocational Learning in Technological and Applied Studies* booklet provided to teachers in 2003.



1.2 *School to Work: Creating Future Pathways 2005-2007*

School to Work: Creating Future Pathways extends and builds on the successes of the *School to Work Program* implemented between 1999-2003 as part of the NSW Government commitment to support students in transition from school to post-school education, training and employment destinations.

School to Work: Creating Future Pathways recognises the impact on young people's life decisions in a world where ideas about work and practices in the workplace are changing rapidly. Students need to develop employment related skills and enterprising attributes that can be applied to a range of jobs and careers, and to be prepared to engage in lifelong learning.

School to Work focuses on four priority areas:

- Planning Transition Pathways
- Exploring Career Futures
- Strengthening Student Outcomes through Vocational Learning
- Building Networks and Connections.

1.3 Enterprise learning in Technology

Enterprising students possess the drive and commitment to identify, initiate, be resourceful and manage activities that are real and relevant to them both within school and the wider community. Enterprise learning develops students' personal and employment related attributes including the ability to be innovative and to successfully manage change.

The Enterprise Education Action Research (EEAR) project funded by the Australian Government (2002/2004) highlighted that ... *the focus of enterprise education should be on students' learning as enterprising people, rather than on activity alone*.

Therefore, students will be encouraged to be enterprising when they are provided with opportunities of:

- **Student ownership** – students are given opportunities to have greater control of the learning experience rather than having decisions made for them – for example, negotiating tasks and related assessment criteria. This involves making the learning environment as real as possible so that students will become actively involved in and own what is occurring.
- **Experiential learning** – activities that allow students to learn by 'doing' both in and outside the classroom. This will combine classroom learning and participation in the broader school community.
- **Cooperative learning** – students learn with and from each other including working in teams both inside and outside school boundaries. This includes the ability to exercise personal and shared responsibility, rather than being dependent on the teacher to solve problems and resolve issues.
- **Reflective practice** – opportunities for evaluation need to be built into the learning outcomes of the activity so students learn from their experiences.

In this respect, enterprise learning is not something new but something that needs to be made **more explicit** to students as they are learning, and needs to be **integrated into normal classroom practice**. In this way, students will be able to apply their wider school learning to real life situations thus making learning more authentic, relevant and engaging.

Effective partnerships between schools, parents, local business and industry are a key factor in the success of enterprise learning. The support and engagement of business and communities provide students with the opportunity to put their enterprising skills into practice.

Examples of enterprise learning in Technology courses could include students:

- effectively managing design projects that meet specified outcomes
- participating in *The Minister's Young Designer Awards* (MYDA)
- planning, organising and running events such as exhibitions of works, objects and goods produced from Textiles and Design, Design and Technology or Industrial Design
- undertaking the *Young Achievement Australia, Business Enterprise Program* which involves student teams forming companies to market goods – for example, choosing businesses that produce, package and retail an unusual or novelty food product
- designing and constructing web pages for local community businesses and educational organisations
- planning, designing and implementing a computerised system for data collection for use at sports carnivals
- being involved in the establishment and running of a school-based café – for example, designing menus, developing a web page, ordering food, developing budgets, front and back of house operations
- organising, contributing and publishing school publications including newsletters, student magazine, Year 10 booklet, Year 12 booklet
- linking with local farmers to prepare cattle for showing at local and state shows
- operating a practice firm within the Australian Network of Practice Firms, selling virtual products – for example, fashion items, or virtual services – for example, indoor plant hire

- training community groups to use various computer programs and the Internet
- conducting a fund raising exercise – for example, auction, with products from Industrial Technology, Food Technology, Textiles Technology, Design and Technology or Agricultural Technology
- designing and constructing a shade house to establish a nursery, with community assistance
- planning, organising and running events such as team participation in the State-wide Web Page Design competition
- establishing and running an in-school Help Desk to assist teaching and administrative staff with computer related software and hardware problems.

List some examples of enterprise learning that your students are involved in/could be involved in:

My students are involved in/could be involved in:

Further information and student activities are provided in the *Employment Related Skills Logbook*.

1.4 Quality teaching in NSW public schools

Vocational Learning in Technology assists teachers to improve student outcomes by supporting the *Quality teaching in NSW public schools* model of pedagogy. It provides teachers with ideas, approaches, tools, resources and support materials that promote high levels of **intellectual quality**, a high **quality learning environment** and **significance** by connecting students with authentic learning contexts.

1.5 Assessment for learning

Vocational Learning in Technology provides support for teachers to plan and implement effective assessment for learning strategies. This includes the use of contemporary assessment strategies which are evidence-based and which help make learning more meaningful and important to students.

Student self-assessment and peer-assessment opportunities are encouraged through the use of tools such as the *Employment Related Skills Logbook* and activities from *The Real Game Series*, for example. Also encouraged are assessment strategies that involve authentic learning contexts that connect students with their world. Such strategies could include enquiry-based research assignments and projects and fieldwork activities involving students in work-based and community-based learning.

1.6 Vocational learning syllabus links in the Technology curriculum

1.6.1 *Work, Employment and Enterprise* in the Technology Years 7-10 syllabus

The NSW Board of Studies has included cross-curriculum content and student learning outcomes for *Work, Employment and Enterprise* in all new Years 7-10 syllabuses. By addressing *Work, Employment and Enterprise* content, Technology teachers can assist students to develop important knowledge, understanding, skills, values and attitudes about work, employment and the workplace. Students can also be encouraged to engage with enterprise, service, community and work-based learning opportunities. *Vocational Learning in Technology* supports Technology teachers in addressing these syllabus outcomes.

1.6.2 *Key Competencies* in the Technology Years 7-10 syllabus

Key Competencies are generic competencies essential for effective participation in existing and emerging learning for future education, work and life.

The *Key Competencies* are embedded in the Years 7-10 Technology subjects listed below:

- Technology (Mandatory) – page 19
- Agricultural Technology – page 16
- Design and Technology – page 17
- Food Technology – page 17
- Graphics Technology – page 16
- Industrial Technology – page 17
- Information and Software Technology – page 17
- Textiles Technology – page 17.

All seven *Key Competencies* are addressed in Technology (Mandatory), Design and Technology, Food Technology, Graphics Technology, Industrial Technology, Information and Software Technology, and Textiles Technology.

The *Key Competencies* are:

- collecting, analysing and organising information
- communicating ideas and information
- work as individuals and as members of groups
- planning and organising activities
- solving problems
- using mathematical ideas and techniques
- using technology.

In Agricultural Technology, the *Key Competencies* addressed are:

- collecting, analysing and organising information
- communicating ideas and information
- work as individuals and as members of groups
- planning and organising activities
- using technology.

1.6.3 *Key Competencies* in the Technology Stage 6 syllabus

The *Key Competencies* are embedded in the Technology Stage 6 subjects listed below:

- Agriculture – page 13
- Design and Technology – page 12
- Engineering Studies – page 14
- Food Technology – page 11
- Information Processes and Technology – page 13
- Industrial Technology – page 13
- Software Design and Development – page 13
- Textiles and Design – page 11.

The *Key Competencies* embedded in the Technology Stage 6 syllabus to enhance student learning are:

- collecting, analysing and organising information
- communicating ideas and information
- planning and organising activities
- working with others and in teams
- using mathematical ideas and techniques
- solving problems
- using technology.

Key Competencies are also embedded in Industry Curriculum Framework courses and other Vocational Education and Training (VET) courses offered by schools. Industry Curriculum Framework courses and VET courses most commonly identified in the Technology KLA are:

- Construction Curriculum Framework
- Hospitality Curriculum Framework
- Information Technology Curriculum Framework
- Metal and Engineering Curriculum Framework
- Primary Industries Curriculum Framework
- Tourism Curriculum Framework
- Electrotechnology CEC
- Furnishing CEC
- TAFE-delivered VET courses.

1.6.4 Vocational learning outcomes in Technology Stage 6

Technology Stage 6 subjects strongly support and promote vocational learning outcomes. The following examples from the rationales of Stage 6 syllabuses illustrate this link.

- Opportunities for multiple pathways to employment and further education. Some students may be stimulated to move into post-secondary agricultural courses or to seek employment in rural and related industries (Agriculture, page 6).
- Opportunities for students to develop design projects in areas of individual interest, to discuss equity issues related to design, production and manufacturing in Australian society and to consider careers in the fields of design and manufacturing (Design and Technology, page 6).
- The opportunity for students to follow a number of pathways. These include tertiary education, vocational education and training, and the world of work. For those following a pathway of further study, the insight and experience associated with a study of engineering will be beneficial in their presumed knowledge of the area of study (Engineering Studies, page 6).
- Opportunities exist for students to develop skills relating to food that are relevant and transferable to other settings. Such skills include the ability to research, analyse and communicate (Food Technology, page 6).
- Students will be well prepared to pursue further education and employment across an especially wide range of contexts (Information Processes and Technology, page 6).
- Through a process of observing and analysing industry practice and through personal practical experiences, students will gain knowledge and skills together with appropriate attitudes about technology and industry (Industrial Technology, page 6).
- On completion, the subject provides students with options in the workforce, TAFE and university study (Software Design and Development, page 6).
- The course provides pathways into further education and training or employment in textile related fields, allowing students who undertake Textiles and Design Stage 6 to contribute positively to industry and society (Textiles and Design, page 6).

2. Employment Related Skills in the Classroom

"People will have a portfolio, individually managed careers … Employees will also have to cultivate more transferable skills … and be constantly re-training."

Dr Jim Bright, University of NSW (2004)

2.1 Employment related skills

Employment related skills are generic skills which are transferable to the ever-changing work environment. These skills are developed throughout a person's life and in multiple settings, including work and life settings and educational contexts. Nine skills have been identified in the *Employment Related Skills Logbook*. They are:

Self-management	**Communication**	**Problem solving**
Initiative and enterprise	**Teamwork**	**Technology**
Learning	**Planning and organising**	**Cross-cultural understanding**

Employment related skills are highly valued by employers. Education programs that emphasise these skills offer students a comparative advantage in the labour market. These skills also support young people in becoming active citizens in their community.

Each teacher has a role to play in helping young people develop their employment related skills. For more information, the guide *5.1 Employment related skills and their elements* has been developed to support classroom teachers in identifying the employment related skills students are able to demonstrate by participating in curriculum activities.

2. Employment Related Skills in the Classroom

2.1.1 Identifying employment related skills – a questionnaire for teachers

Are you already teaching employment related skills in the classroom?

Students gain a variety of employment related skills in every subject. Complete this questionnaire to identify employment related skills you are already teaching to your students.

Do your students develop any of these skills in your classroom?
Tick and add to the list below.

Self-management

(✓) Are you teaching your students to:

- ❑ have clear personal goals and strategies
- ❑ be task-orientated and outcomes focused
- ❑ show interest, initiative and effort
- ❑ seek advice and support when required
- ❑ be pro-active in career planning, time management and setting challenges.

Initiative and enterprise

(✓) Are you teaching your students to:

- ❑ identify opportunities
- ❑ develop a strategic, creative, long-term vision
- ❑ show independence and initiative in identifying problems and solving them
- ❑ enjoy the challenge of new experiences.

Learning

(✓) Are you teaching your students to:

- ❑ learn in any setting
- ❑ identify and access learning sources and opportunities
- ❑ use a range of mediums to learn including mentors, peers, networking and information technology
- ❑ acknowledge the need to learn in order to accommodate change.

Communication

(✓) Are you teaching your students to:

- ❑ speak to a group confidently
- ❑ speak and write in another language
- ❑ follow verbal instruction
- ❑ select the appropriate communication form and style
- ❑ use verbal and non-verbal modes of communication.

Teamwork

(✓) Are you teaching your students to:

- ❑ understand how to operate in teams
- ❑ recognise and respect people's diversity, individual differences and perspectives
- ❑ establish group goals
- ❑ manage and resolve conflict when appropriate.

Planning and organising

(✓) Are you teaching your students to:

- ❑ take initiative and make decisions
- ❑ manage time and priorities
- ❑ establish clear project goals and deliverables
- ❑ collect, analyse and organise information, using appropriate methods.

Problem solving

(✓) Are you teaching your students to:

- ❑ anticipate, identify, clarify and frame problems
- ❑ develop and explore practical solutions
- ❑ analyse and assess information and situations
- ❑ implement solutions.

Technology

(✓) Are you teaching students to:

- ❑ gain a range of basic information technology skills
- ❑ manage and use technology
- ❑ understand the social implications of technology.

Cross-cultural understanding

(✓) Are you teaching your students to:

- ❑ understand and respect cultural and community diversity
- ❑ work with people of different ages, gender, race, religion
- ❑ show respect and concern for others
- ❑ interact with sensitivity and empathy.

2.1.2 Examples of employment related skills developed in Technology Stages 4, 5 and 6

Students gain a variety of valuable employment related skills in every subject they study. Here are some examples of employment related skills developed by students studying Technology courses in Stages 4-6.

Employment Related Skills	Students can … /Students are able to … /Students know how to …
Self-management Ability to take responsibility for setting and achieving personal goals	• manage and plan activities • create a work schedule and timeframe for projects • allocate resources to achieve desired goals effectively and efficiently • develop solutions to meet identified needs and wants • carry out ongoing self-evaluation of the project resulting in modifications to meet needs and wants • compare final project outcomes with initial project proposal.
Initiative and enterprise Ability to seek/take advantage of opportunities	• identify design opportunities to meet unsatisfied needs and wants • analyse the inspirational sources and creative approaches used by designers • use creativity and lateral thinking when designing • present storyboards and collages to communicate ideas creatively and effectively • explore non-traditional uses of tools, materials and techniques in projects • demonstrate flexibility and adaptability in the development of projects • relate concepts of creativity and innovation to the work of designers.
Learning Ability to achieve new skills and/or knowledge	• locate, present and acknowledge relevant information from a range of sources in developing a project • design and create technology solutions for a variety of real-world problems that meet identified needs or wants • develop appropriate experiments to test ideas and solutions • identify technical skills required to successfully complete a project and practise those skills to enable competent use • suggest value adding ideas for a particular product • willingly accept ideas from peers and mentors throughout the design process.
Communication Ability to express and understand information	• communicate with team members to establish and achieve goals • use feedback on practical techniques to make improvements • document research methods and procedures used in the construction of projects • use a variety of techniques to communicate and present the development of a design project including oral, written, graphical and computer software elements • prepare graphs, plans, diagrams and/or construction drawings for the designing of projects • use storyboards to assist in the construction of an information product • access information and ideas through a range of written and oral media.

Employment Related Skills	Students can … /Students are able to … /Students know how to …
Teamwork Ability to work effectively with others to get things done	• initiate, negotiate and organise group activities with others in the development of a project • actively listen while others present their ideas • participate in group activities to share resources and to solve problems • negotiate and work cooperatively in a group • accept and act upon constructive advice • have respect for other's privacy and intellectual property.
Planning and organising Ability to coordinate and prioritise tasks and resources	• establish and adhere to a realistic time plan • to manage a project to completion • display sensitivity and tact in the allocation of roles in a group situation • provide guidance to and support for others as a peer and in a group situation • negotiate the shared use of equipment and resources • effectively manage personal and physical resources.
Problem solving Ability to identify problems and develop solutions	• develop solutions to meet identified needs and wants • identify potential concerns that will need to be overcome to achieve a satisfactory final design • continually assess the progress of design projects • plan and price goods and services to markets • interpret information contained in a table or graph • estimate quantities of materials required for projects.
Technology Ability to use appropriate technologies to complete tasks	• understand that emerging technologies will influence the use of materials and techniques in projects • recognise that the tools, techniques and materials used in projects will impact on the final solution, individual, society and environments • access, manipulate and process information through Computer Aided Design (CAD) • create and import graphical images to be manipulated and displayed • select and use appropriate computer hardware and software applications to assist in the planning, production and evaluation of projects.
Cross-cultural understanding Ability to respect diversity and act without discrimination	• understand the significance of cultural differences when developing solutions to meet identified needs • present ideas in a manner that respects people of diverse cultural, religious and linguistic backgrounds • recognise the potential contribution of Australia's Indigenous heritage when exploring possible solutions to a design project • examine cultural and religious issues related to projects.

2.1.3 Sample unit of work annotated with employment related skills

As you can see from completing the previous questionnaire, you are already teaching employment related skills in your classroom. The next step is to make it explicit in your current teaching programs. A simple way to start is to annotate a current teaching program with employment related skills. Overleaf is a sample unit developed for the Technology Unit, Curriculum K-12 Directorate showing annotated employment related skills for you to use as a guide.

Stage 5 Design and Technology
Unit 1: Graphic design

Outcomes	Learn about:	Learn to:	Teaching and learning strategies
5.1.1 5.3.1 5.3.2 5.6.3	**The concepts of design,** p. 19 • nature and definitions of design, technology and appropriate technology		Introduction to course Learning
	• purposes and concept of design and technology.	• identify the purpose of design across a number of focus areas of design.	• discuss syllabus focus areas with examples of the purpose of design in each selected area • activity focused on needs approach to design and pr as a common theme. Planning and organising
	• interdisciplinary nature of design which draws on disciplines such as mathematics, sciences, fine arts and humanities.	• analyse a case study that demonstrates the interdisciplinary nature of design • outline, reflect and apply collaborative methods when developing a design solution.	• case study on a building de the need for architects, eng neers, town planners and managers to work collaboratively to create effective solutions for communities • or aircraft development and its need for engineers to develop flight dynamics, engine performance, control and/or military systems to satisfy government or commercial expectations, e.g. Lockheed/Martin F38 (X38). Problem solving
	Identification of needs and opportunities, p. 21 • design considerations.	• establish and document the requirements and design considerations for the design project.	• introduction to project through and evaluation • students negotiate an area for development and research in depth, the needs of the end user • class brainstorm list of items for consideration including available resources including materials, tools and techniques.
	Factors affecting a holistic approach to design and production, p. 20 • design purpose and setting factors • human, technical and environmental factors.	• describe factors affecting the design and production of design ideas and solutions from selected focus areas of design • apply a holistic approach by considering the factors affecting design and production in a design project.	• introduce examples of designed solutions to students for the purposes of modelling the importance of design through a holistic approach • students investigate factors that influence design, including elements and principles of design (line, shape, size, colour, texture, tone, repetition, graduation, rhythm, radiation, harmony, contrast, dominance, proportion, balance, unity) and report on human technical and environmental factors specific to the example.

Outcomes	Learn about:	Learn to:	Teaching and learning strategies
	Creative and innovative idea generation, p. 21 • brainstorming • concept sketches and maps • observation • research.	• use idea generation techniques when developing creative design ideas • use research and information when generating creative design ideas.	• create a graphic design, which c applied to an object, e.g. wall h shirt, handbag • students begin the process of idea generation by brainstorming to provi direction, sketching, observation a collaboration. The complexity and of innovation of the designed sol ion should increase as students research and explore new ideas and solutions.
	Research and exploration • access information and data	• use electronic communication tools to research information • research appropriate materials, processes and production methods for the design project.	• students research and examine a range of graphic designs from a range of mediums to assist in the development of the designed solution • students research materials, tools and techniques used in the development of designed solutions from the graphics focus area of design including apparel producers (Mambo, logos), TV commercials, magazine adv billboards, news backdrop
	Communication and presentation techniques, p. 22 • written • visual • digital.	• apply appropriate communication techniques when documenting and presenting design ideas and solutions • use ICT applications for presentation of documentation.	• students write a report on a s cted graphic design and/or designer of graphics and consider the factors influencing design including elements and principles, effect and impact on society, and ethical and responsible design. Specifically students should discuss the important role of gra design (images) in conveyin either subtle or obvious.
	Realisation of design ideas using technologies including: • tools and equipment • materials • techniques, p. 23.	• select and use tools and equipment when designing and producing each project • select and use a variety of appropriate techniques when designing and producing each design project.	• students produce the design sol ion and work safely and efficiently using the selected materials, tools and techniques appropriate to the design project.
	Evaluating, p. 23 • the impact of resource selection.	• document and evaluate decisions made throughout the design process using specified criteria for success • self-assess and peer-assess designed solutions.	• evaluate and reflect on design process and product, using oral, written or p assessment • reflection on design process: student to discuss what they have achieved during the development of the solution and consider how the stages of the design process have assisted in completing the project • literacy: report/evaluate.

Initiative and enterprise

Planning and organising

Communication Technology

Problem solving

Learning

2.2 *The Employment Related Skills Logbook*

The Employment Related Skills Logbook is a central element of the NSW Government's *School to Work: Creating Future Pathways*. This logbook has been developed as a means of enhancing students' understanding of the employment related skills they are developing at school and in the community throughout their school years and recording their individual school to work transition planning.

The logbook is a:

- planning tool for students to document employment related skills
- tool for teachers/schools to monitor a student's personal growth and responses to their current learning and future choices
- source of vocational and enterprise learning activities
- source of career/transition references
- tool that encourages students to self-manage their personal career journey
- storage folder for certificates and other important documents
- resource to help students prepare a résumé
- useful tool for schools to use when writing school leaver references.

A CD-ROM is provided in each logbook which contains electronic templates of all pages, allowing teachers and students to print off additional pro-formas and edit pages to suit students' needs.

The Employment Related Skills Logbook is a flexible resource for students to collect evidence and document their vocational learning experiences. Each logbook will vary in its collection of content as each individual student has different ideas and aspirations for their future. Ideally, the logbook should be a mix of teacher-directed materials and evidence of student's self-managed transition planning and skills development.

2.2.1 Why use the logbook?

Use of the logbook is consistent with the key directions of the Board of Studies *K-10 Curriculum Framework* and new syllabuses. It is a tool which supports the implementation of the *Work, Employment and Enterprise* cross-curriculum content statement in all new Years 7-10 syllabuses.

The logbook:

- provides teachers with a practical tool for engaging students in self-assessment and peer-assessment, which are features of the new Years 7-10 syllabuses. Such exemplary assessment practices provide opportunities for students to assume responsibility for their own learning which provides a sound basis for personalised learning
- supports teachers in implementing vocational learning across all Stage 5 and 6 key learning areas in line with the *Key Competencies*
- supports the *Quality teaching in NSW public schools* model by enabling classroom teachers to demonstrate to students how their subject develops the skills needed for life after school. It enhances the relevance of all activities students participate in during their school years both inside and outside the classroom
- addresses the demand from employers worldwide for young people to develop generic work skills
- supports contemporary career development practice, which encourages all individuals to develop the capacity to self-manage their careers from a young age.

2.2.2 What's new in the 2005 logbook?

The logbook has been updated to reflect feedback provided by schools. Below is a list of the major changes:

- **Revised employment related skills for Years 9-12**
  The new employment related skills are based on the Employability Skills Framework developed by a project that gathered the views of industry on the critical generic skills required to facilitate employability in Australian workplaces.
- **A description of each skill and how it is demonstrated in the classroom context**
  It is crucial that students have the ability to articulate how they have demonstrated these skills throughout their school and community experiences.
- **New enterprise learning section**
  Activities in this section centre on enterprising attributes and students identifying those attributes within themselves.
- **Revised log sheets**
  The new format allows students to describe the learning experience, identify employment related skills, record examples of how skills were demonstrated and then reflect on the activity or process. The new format assists students to self-manage the process.
- **Improved student instructions and activities**
  Instructions allow students to complete activities independently and self-manage the use of the logbook away from school. Of particular interest are the step-by-step instructions for using the Summary section.
- **Graphics to enhance appeal to students**
  The revised pages are visually appealing for students and show a mix of illustrated pages and plain pages.
- **Introduction section renamed Student section**
  Student section better reflects the focus on providing students with activities relating to self and career exploration to enable them to plan for their futures.
- **CD-ROM supplied with each logbook**
  All templates are provided in Microsoft Word format.
- **New press binder fitting to fasten the Résumé Section.**

2.2.3 The *Employment Related Skills Logbook* overview

The *Employment Related Skills Logbook* content is designed to encourage students to identify and record their vocational learning experiences. There are eight sections of the logbook which are: Student, Classroom, School & Community, Workplace Learning, Enterprise Learning, Summary, Blank and Résumé. The overview below provides teachers with information regarding the intention of each section and includes suggested strategies for use and guides to facilitation.

Student Section	
Overview	**Who?**
• Contains activities relating to self and career exploration. This section can be used by schools to monitor students' progress with their current learning and its relevance to future choices. • Students can use this section to file research materials and activities regarding their planning processes for their futures. • The Student Section can also be used in careers lessons.	May be facilitated by: • members of the School to Work team • Year adviser • careers adviser.
What's in the Student Section?	**Suggested strategies for using the Student Section**
This Is Me Now activity	An activity for students to reflect on their current life situation and where they would like to be in the future. It is a starting point for students in their school to work planning.
Career research activity using the *myfuture* website	An introduction to the website **www.myfuture.edu.au**. Printed sheets from the *My Guide* section of the website can be stored in the Student Section of the logbook (eg *My Summary*).
Action Plan for students to familiarise them with the process of goal setting	The Action Plan is designed for students to complete at the start of a year, semester, term, week or day. It's a flexible activity that can assist students in their planning processes. There is also an Action Plan in the *My Guide* section of **www.myfuture.edu.au** under *Planning*.
Tracking Sheets for Years 9-12	The Tracking Sheets can be used for school-based tracking, school to work interview processes and student's personal use. The preliminary and HSC Tracking Sheets also monitor subject selection to align with NSW Board of Studies requirements.
Exit Plan for school leavers	The Exit Plan can be worked through with a student who is thinking of leaving or will be leaving school. Designed to be completed and actioned in the last few weeks of school. Students can also file their Student Feedback Report from the *School to Work Program Student Survey* in the Student Section.

2. Employment Related Skills in the Classroom

Classroom Section	
Overview	**Who?**
Introduces the process of logging employment related skills (ERS). The Classroom Section enables teachers to incorporate vocational learning outcomes into their lessons.	• Facilitated by Key Learning Area (KLA) teachers. It is intended that classroom teachers incorporate the process of logging ERS into their teaching programs. • KLA teachers have discretion as to the frequency of logging ERS in their lessons.
What's in the Classroom Section?	**Suggested strategies for using the Classroom Section**
Employment related skills in the classroom for Years 9-12	Definitions for each of the ERS to enhance students' understanding of what they mean. This page can be a reference to assist in completing log sheets.
Activities and examples of employment related skills in the classroom for Years 9-12	Teacher and student examples of how to document ERS demonstrated by students in the classroom. They are preliminary activities and sources for logging ERS.
Sample classroom log sheet	A worked example to assist students in understanding how to log ERS developed in their courses.
Classroom log sheets	Used by students to log the ERS learned in the classroom. Students reflect on the Classroom Activity, Topic, Assignment or Unit then document how three ERS were demonstrated. Students can also reflect on the learning experience.
Computing skills student/teacher assessment	This is a checklist of the skills that students would be expected to display as a result of the ICT cross-curriculum content statement in all new Years 7-10 syllabuses. It assists KLA teachers to determine the extent to which ICT content is addressed in their programs. The resource *ReCaP* provides many student activities on employability skills which align with ERS outlined in the logbook.

School & Community Section	
Overview	**Who?**
• This section gives students the opportunity to record and document their participation in activities outside the classroom and log the employment related skills (ERS) developed in those activities. • It is assumed that students have worked through the Classroom Section and are familiar with the process of logging ERS. The intention is for students to be confident to self-manage logging their ERS for school and community activities.	May be facilitated by: • classroom teacher • careers adviser • Year adviser • School to Work team member.
What's in the School & Community Section?	**Suggested strategies for using the School & Community Section**
Summary of participation and achievements	A checklist for students to list the school and community activities that they have participated in. It may also prompt students to become involved in activities that they may not have thought of.
School & Community log sheet	Same format as the Classroom log sheet. See notes under Classroom log sheet.

Workplace Learning Section	
Overview	**Who?**
• This section gives students the opportunity to focus on the ERS developed through workplace learning experiences. • The intention is for students to work through this section at the time of participation in workplace learning.	May be facilitated by : • careers adviser • VET teacher • School to Work team member.
What's in the Workplace Learning Section?	**Suggested strategies for using the Workplace Learning Section**
Examples of workplace learning	This page is to prompt discussion regarding examples of workplace learning. It includes a list of personal attributes that employers seek in employees as well as providing examples of ERS gained from workplace learning.
Workplace learning research	This activity is designed to assist students to make informed decisions about their workplace learning and focus on what they would like to get out of the experience.
Workplace learning log sheet	Similar to other log sheet pro-formas. This sheet incorporates details of the employer and workplace.

Enterprise Learning Section	
Overview	**Who?**
A new section in the 2005 version of the mainstream logbook. This section highlights the value of authentic learning through enterprise education. It also provides activities and links to many useful resources and programs. This section may also house other worksheets/information/resources relating to enterprise learning. **Note:** Section 5 of the resource *ReCaP* contains a section on enterprise learning and activities that could be used in conjunction with those in the logbook.	May be facilitated by: • KLA teachers • careers advisers • School to Work coordinators • students, who may take the initiative to research enterprise activities and programs themselves and participate.
What's in the Enterprise Learning Section?	**Suggested strategies for using the Enterprise Learning Section**
An enterprising person	A series of attributes that contribute to an enterprising person. This page can be used to discuss the nature of enterprise learning.
Enterprise profile	A research activity for students to understand the attributes and qualities of an enterprising person. The profile prompts students to write about the person's job/role and look at all the varied activities the person is involved in. Students can use the internet or interviews to compile the relevant information.
Student enterprise survey	The survey was designed as an assessment tool through the *Enterprise Education Research Project* (DEST 2004). Students can complete the questionnaire to assess their enterprising attributes so they gain an insight into their strengths and areas for development.
Enterprise survey evaluation	The survey evaluation is an opportunity for students to look at their responses from the survey and reflect on their strengths and areas for development.
Project-based enterprise learning	A project-based enterprise learning activity.
Enterprise activities	Examples of enterprise learning activities sorted by KLA.
More enterprise activities	Enterprise web site resources.
Enterprise learning log sheets	Students use these sheets to log their employment related skills demonstrated through enterprise learning activities.

Summary Section	
Overview	**Who?**
This section allows students to summarise their employment related skills (ERS) by collating skills from all their log sheets.	May be facilitated by: • careers adviser • VET teacher • School to Work team member.
What's in the Summary Section?	**Suggested strategies for using the Summary Section**
Summary of employment related skills	These pages are for students to collate their ERS from all completed log sheets. This process will enable students to create a dossier of ERS to be used in the preparation of résumés, applications for jobs or for further education.
Blank Section	
Overview	**Who?**
The Blank Section is an area for students to file additional activities related to their transition planning. These may include: • specific vocational learning classroom activities • logbook assignments and or homework • work for *The Real Game* series • **www.myfuture.edu.au** research or • any careers related research. The statement page after the cardboard tab is meant to be taken out once the space is used. Students can write the title of this section on the cardboard tab.	This section may be student or teacher managed.

myfuture
Australia's career information service
myfuture.edu.au

the Real game series™

Résumé Section	
Overview	**Who?**
The Résumé section helps students write a résumé and compile their portfolio.	May be facilitated by: • KLA teacher • careers adviser • Year adviser.
What's in the Résumé Section?	**Suggested strategies for using the Résumé Section**
Tips for setting out a résumé/portfolio	This page outlines a few tips for students as a starting point for discussion on how to plan or write a résumé. For further information students can log on to **www.myfuture.com.au.**
Résumé cue cards	These are designed to be cut up into squares and are "reminders" for where documents are to be filed in the future. These pages are a guide to help students write their résumé. Students should be encouraged to look at different types and formats of résumés to create an individual document.

2.2.4 Models of logbook implementation in schools

There is no single or preferred model for implementation of the *Employment Related Skills Logbook* as each school responds to the diverse needs of their students.

Ultimately, the goal is for students to be competent self-managers of their career path and planning and this would include, as a key element, effectively using and managing the logbook. The guidance and support of teachers in this process is critical to individual student success.

The models below indicate how the logbook is currently being managed by schools.

MODEL 1	The classroom unit is taught to students through a variety of learning and assessment strategies. Logging of employment related skills is completed at the end of the unit and the log sheet is filed into the logbook.
MODEL 2	Logging of employment related skills is completed once a week throughout the unit of work. Various activities and/or assignments are logged and log sheets are filed in the logbook.
MODEL 3	Unit of work is taught to students. Careers adviser manages the logging of employment related skills of selected lessons/subjects in careers lessons.
MODEL 4	The school timetables a *School To Work* week, once a term. Employment related skills are logged in each lesson for the duration of that week.

2.2.5 Teacher examples: Logging employment related skills in the classroom

Agricultural Technology Stage 5

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Agricultural Technology Stage 5 outcomes. Using the examples as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Placement: Plant Nursery production

Unit description: Basic techniques of plant propagation

Propagate plants specific to season and availability that may be taken home or sold to members of the school community

Employment Related Skills ☑

☑ Self-management	☑ Initiative and enterprise	☑ Learning	☐ Communication	☐ Cross-cultural understanding
☐ Teamwork	☐ Planning and organising	☐ Problem solving	☐ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Initiative and enterprise*

- *potentially sell propagated material to other members of the school community*
- *demonstrate independence in working on individual plant production*

Skill: *Learning*

- *experiment with a variety of propagation techniques*
- *understand the process of plant propagation using plant tissue culture techniques*

Skill: *Self-management*

- *use and maintain equipment in the correct manner for personal and group wellbeing*
- *keep a focus on the propagation task as it may be spread throughout the year due to the distinct seasonality of many propagation procedures in many species*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *Students can understand the basic principles of plant propagation that will help the success of home gardens.*

Design and Technology Stage 5

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Design and Technology Stage 5 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Placement: Focus area of design – Digital media

Unit description: Produce a video related to school life to be shown to parents

Employment Related Skills ☑

☐ Self-management	☐ Initiative and enterprise	☑ Learning	☑ Communication	☐ Cross-cultural understanding
☐ Teamwork	☑ Planning and organising	☐ Problem solving	☐ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Planning and organising*

- *implement management strategies so that the video is produced in the given time frame*
- *analyse media footage for artistic and technical considerations*

Skill: *Communication*

- *identify effective ways of communicating through the use of digital media*
- *produce a storyboard to plan video production stages*

Skill: *Learning*

- *use different techniques to maximise the potential of the digital camera*
- *appreciate some of the issues facing film houses, including cost, quality, time and technology*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *By participating in this activity, students gain a new understanding of the many roles that exist in a film house and the huge investment of time that goes into even a short piece of film.*

2. Employment Related Skills in the Classroom

Food Technology Stage 5

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Food Technology Stage 5 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Placement: Focus Area: Food for Special Occasions

Unit description: Plan, prepare and host a function to celebrate a special occasion

Employment Related Skills ☑

☐ Self-management	☐ Initiative and enterprise	☑ Learning	☐ Communication	☑ Cross-cultural understanding
☐ Teamwork	☐ Planning and organising	☑ Problem solving	☐ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Teamwork*

- *allocate roles according to the strengths of team members*
- *devise a work flow plan for all team members*

Skill: *Problem solving*

- *consider a range of factors when selecting foods for a special occasion, including nutritional value of food, appeal of food, characteristics of diners – age, health, culture, tastes, number*

Skill: *Cross-cultural understanding*

- *recognise the significant role food plays in celebrating special occasions*
- *explore the various special occasions celebrated by different cultural groups*
- *investigate any dietary considerations of the guests*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *Students can see that it is important for professional caterers to find out the cultural backgrounds of guests, so that everyone can relax and enjoy the occasion.*

2. Employment Related Skills in the Classroom

Industrial Technology – Timber Stage 5

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Industrial Technology Stage 5 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Placement: Focus Area: General Wood Core Module 1

Unit description: Produce a videoICD rack unit

Employment Related Skills ☑

☑ Self-management	☑ Initiative and enterprise	☐ Learning	☐ Communication	☐ Cross-cultural understanding
☐ Teamwork	☑ Planning and organising	☑ Problem solving	☐ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Problem solving*

- *take responsibility for wearing the correct safety gear and being aware of safety procedures in a workshop*
- *follow safe work practices*

Skill: *Initiative and enterprise*

- *suggest ideas for end pieces with possible fretwork decoration*
- *produce sketches and drawings to communicate proposed details of end decoration*

Skill: *Planning and organising*

- *research the use of plantation softwood in Australia*
- *explore occupations in the forestry industry*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *Students are able to meet deadlines and produce a videoICD rack unit.*

2. Employment Related Skills in the Classroom

Graphics Technology Stage 5

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Graphics Technology Stage 5 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Placement: Core Module 3

Unit description: Produce a pictorial representation of a pull-along toy for a child 18 months old to 3 years old

Employment Related Skills ☑

☐ Self-management	☑ Initiative and enterprise	☑ Learning	☑ Communication	☐ Cross-cultural understanding
☐ Teamwork	☑ Planning and organising	☐ Problem solving	☑ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Technology*

- *use 3D modelling and rotational techniques to represent a realistic view of the toy*
- *develop a PowerPoint presentation*
- *use CAD software to create basic shapes and experiment with colour and texture*

Skill: *Initiative and enterprise*

- *develop concept sketches of a pull-along toy detailing all aspects of the item including the materials and finishes used*
- *produce quality drawings reflecting Australian drawing standards*
- *use drawings and explanations to communicate construction details*

Skill: *Planning and organising*

- *research children's toys from a variety of sources such as trade and consumer magazines, libraries and the Internet*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☐ areas of success	☐ areas for improvement	☑ further research

- *Attention to detail is a crucial factor when presenting drawings of an item to meet a specific need.*

2. Employment Related Skills in the Classroom

Information and Software Technology Stage 5

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Information and Software Technology Stage 5 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Placement: Option 6 – Networking Systems

Unit description: Design a small network of at least two workstations to allow for file sharing

Employment Related Skills ☑

☑ Self-management	☐ Initiative and enterprise	☐ Learning	☐ Communication	☐ Cross-cultural understanding
☐ Teamwork	☐ Planning and organising	☑ Problem solving	☑ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Self-management*

- *seek advice from peers and teacher as required*
- *sequence the planning of the network in general terms*
- *complete the project within the specified timeframe*

Skill: *Technology*

- *graphically represent a LAN or WAN using dedicated graphics software*
- *compare a client/server network with a peer/peer network*

Skill: *Problem solving*

- *determine the specifics of the task*
- *identify types of network options available to solve the task*
- *plan possible test cases*
- *evaluate a solution in terms of identified performance criteria*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *Developing a small network helped students have a better understanding of how networks exist in the corporate world and the need to link class work to the task requirements.*

2. Employment Related Skills in the Classroom

Textiles Technology Stage 5

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Textiles Technology Stage 5 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Placement: Area of Study: Furnishings

Unit description: Design, produce and evaluate a furnishing item for a specified space in the home

Employment Related Skills ☑

☐ Self-management	☑ Initiative and enterprise	☐ Learning	☑ Communication	☐ Cross-cultural understanding
☐ Teamwork	☑ Planning and organising	☑ Problem solving	☑ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Communication*

- *create a mind map of possible design features, methods of colouration and decoration*
- *interpret and communicate written and verbal instructions*
- *present an oral report to the class, explaining the design, production and performance of the textile item*

Skill: *Problem solving*

- *experiment with a range of techniques used to generate creative ideas for example, brainstorming, thumbnail sketching, design inspiration collage*
- *construct and test samples of techniques including: seams, seam finishes and hems that may be appropriate for the furnishing textile item*

Skill: *Technology*

- *create a database of properties, from research and experimentation that relate to the care of the textile item*
- *design and create a computer generated product label suitable for the textile item*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *Students are able to produce an item for the bedroom that was inspired from something seen at a local market, but cost half the price to make.*

2. Employment Related Skills in the Classroom

Agriculture Stage 6

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Agriculture Stage 6 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Course: Preliminary

Area of syllabus: The Farm Case Study

Description of unit: In a small team, develop a marketing strategy to promote a farm product to a specific consumer group

Employment Related Skills ☑

☐ Self-management	☑ Initiative and enterprise	☐ Learning	☐ Communication	☐ Cross-cultural understanding
☑ Teamwork	☑ Planning and organising	☑ Problem solving	☐ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Planning and organising*
- *identify and assess a range of marketing opportunities for farm products*
- *analyse and evaluate product market information*

Skill: *Problem solving*
- *recognise the problems that may occur in meeting market specifications and suggest possible solutions*
- *identify suitable markets for the farm product (for example, the local beef trade and the consumer preference for lean beef, or the production of a flower crop to coincide with a particular event, such as Mother's Day, Valentine's Day)*
- *understand marketing decisions made by farm enterprises (for example, forward selling of crops, futures contracts, on-farm storage etc; cattle contracts, sale yards, consignment to abattoirs)*

Skill: *Teamwork*
- *collaborate with team members to generate potential ways to 'value-add' to a farm product*
- *ensure that the team goals are clear to all participants*
- *communicate conclusions to peers*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *Students understand how important it is to communicate effectively with team members so that a marketing strategy can be developed for the farm product and that all team members are working towards the same goals.*

2. Employment Related Skills in the Classroom

Design and Technology Stage 6

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Design and Technology Stage 6 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Course: HSC

Area of syllabus: Designing and Producing

Description of unit: Proposal for the major design project

Employment Related Skills ☑

☑ Self-management	☑ Initiative and enterprise	☐ Learning	☐ Communication	☐ Cross-cultural understanding
☐ Teamwork	☑ Planning and organising	☑ Problem solving	☐ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Problem solving*

- *identify design opportunities and possible solutions for a specific need or problem*
- *recognise personal qualities and interests and match these with the scope of the project*
- *propose a range of materials, tools and techniques based on the results of research*

Skill: *Planning and organising*

- *plan and evaluate a proposed sequence of operations and actions for the completion of the project*
- *identify and justify areas of investigation for the project*
- *identify and justify criteria to evaluate success of the project*

Skill: *Self-management*

- *create and justify proposed finance, action and time plans for a major design project*
- *recognise project limitations and be realistic about financial and time restrictions*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *Students develop a clear direction and focus for the major design project, particularly from the feedback received from the teacher. Students have a better understanding of project management skills and organisation needed to achieve and evaluate project outcomes in the workplace.*

2. Employment Related Skills in the Classroom

Engineering Studies Stage 6

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Engineering Studies Stage 6 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Course: HSC

Area of syllabus: Module 1: Aeronautical Engineering

Description of unit: Develop a model for a water powered rocket

Employment Related Skills ☑

☐ Self-management	☐ Initiative and enterprise	☑ Learning	☑ Communication	☐ Cross-cultural understanding
☑ Teamwork	☐ Planning and organising	☑ Problem solving	☐ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Communication*

- *present freehand drawings and sketches of a model rocket to convey ideas*
- *discuss benefits of critical design features*

Skill: *Problem solving*

- *be aware of safety issues when testing models via the completion of a risk assessment*
- *identify and negotiate an appropriate venue for the testing of models*
- *evaluate test results and make suggestions to improve flight capabilities of the model*

Skill: *Teamwork*

- *recruit other students to assist in the filming and recording of test flights*
- *show an appreciation of other students' designs*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *After studying this unit of work, students can see the importance of developing models to enable testing of materials and design features. Testing of models helps reduce risk and minimise losses.*

2. Employment Related Skills in the Classroom

Food Technology Stage 6

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Food Technology Stage 6 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Course: HSC

Area of syllabus: Food Product Development

Description of unit: Develop a food product that meets a consumer need

Employment Related Skills ☑

☑ Self-management	☐ Initiative and enterprise	☑ Learning	☐ Communication	☐ Cross-cultural understanding
☐ Teamwork	☑ Planning and organising	☑ Problem solving	☐ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Planning and organising*

- *carry out market research in order to adequately meet the identified needs in a specific design brief*
- *develop a set of criteria to evaluate new food products and assess a range of existing new food products*
- *evaluate the new food product against the criteria established*

Skill: *Self-management*

- *manage the development of the new food product*
- *develop a realistic time plan to develop the new food product*
- *plan a marketing strategy for the launch of the new food product*

Skill: *Learning*

- *understand the steps involved in the food product development process*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *Students understand the difficulties of creating a new food product that does not duplicate one that already exists.*

Industrial Technology – Timber products and Furniture Industries and/or Metals and Engineering Industries Stage 6

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Industrial Technology Stage 6 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Course: Preliminary

Area of syllabus: Design and Management

Description of unit: Development and completion of a management folio for a group project

Employment Related Skills ☑

☐ Self-management	☐ Initiative and enterprise	☑ Learning	☑ Communication	☐ Cross-cultural understanding
☑ Teamwork	☑ Planning and organising	☑ Problem solving	☐ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Planning and organising*

- *research options for the project by collecting brochures and catalogues, visiting shops, showrooms and manufacturers*
- *analyse and select materials and construction techniques for a proposed solution*

Skill: *Communication*

- *communicate ideas and information by neat freehand sketching, drawing to AS1100, word processing, tables, spreadsheets and oral presentations*

Skill: *Teamwork*

- *identify and establish roles for team members*
- *work in a team to complete the group's set task*
- *show flexibility and deal with change that occurs when working in a team*
- *demonstrate initiative and negotiation skills through working with others*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *Accurate documentation is very important to the overall success of the final project. Ensuring that all students know what their role is helps to get the job done efficiently.*

2. Employment Related Skills in the Classroom

Information Processes and Technology Stage 6

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Information Processes and Technology Stage 6 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Course: HSC

Area of syllabus: Multimedia systems

Description of unit: Evaluating the effectiveness of a printed newsletter versus an online newsletter

Employment Related Skills ☑

☐ Self-management	☑ Initiative and enterprise	☑ Learning	☑ Communication	☐ Cross-cultural understanding
☐ Teamwork	☑ Planning and organising	☐ Problem solving	☑ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Technology*

- *create a multimedia system including combinations of text, hypertext, numbers, audio, images andlor animations and video*
- *capture and digitise data to use in the construction of the newsletter and website*

Skill: *Initiative and enterprise*

- *create a newsletter for publication in printed form and create a multimedia online version (website) with similar content*

Skill: *Planning and organising*

- *identify how multimedia systems dictate the presentation of information*
- *analyse and describe a multimedia system in terms of the information processes involved*
- *evaluate the effect of multimedia on the individual, society and the environment*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *Students see how the website was more effective in reaching the target audience.*

Software Design and Development Stage 6

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Software Design and Development Stage 6 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Course: HSC

Area of syllabus: Software development cycle

Description of unit: Use the software development cycle to meet an identified need

Employment Related Skills ☑

☐ Self-management	☐ Initiative and enterprise	☑ Learning	☑ Communication	☐ Cross-cultural understanding
☐ Teamwork	☑ Planning and organising	☑ Problem solving	☐ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Planning and organising*

- *interpret a system and represent it diagrammatically*
- *identify the elements within a given context – external entities, processes and storage*

Skill: *Problem solving*

- *construct a data flow diagram using information technologies*
- *identify and explain the specifications of the problem*
- *implement the user's requirements throughout the development process*

Skill: *Communication*

- *use the data flow diagram to help communicate and convey meaning to others*
- *describe the need to empower the user and acknowledge the user's perspective*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *Having used this approach to software development, students gain confidence to use this model in other software projects and see the relevance to the commercial sector.*

2. Employment Related Skills in the Classroom

Textiles and Design Stage 6

The following example shows some of the employment related skills developed by students as a result of their participation in activities or topics addressing Textiles and Design Stage 6 outcomes. Using the example as a guide, develop your own list of employment related skills that students may gain by undertaking activities or curriculum topics in your classroom.

Classroom Activity, Topic, Assignment or Unit

Course: HSC Course

Area of syllabus: Major textiles project

Description of unit: Produce a major textiles project in one focus area

Employment Related Skills ☑

☐ Self-management	☑ Initiative and enterprise	☐ Learning	☑ Communication	☐ Cross-cultural understanding
☐ Teamwork	☑ Planning and organising	☑ Problem solving	☐ Technology	

Describe how three of these skills were demonstrated

Students can … /Students are able to … /Students know how to …

Skill: *Problem solving*

- *provide accurate measurements and labelling on production drawings*
- *select materials appropriate to the end use application*
- *justify the selection of techniques and equipment*
- *proficiently manufacture a textile item*

Skill: *Planning and organising*

- *develop a time action plan that includes the activities to be completed*
- *produce quality projects suitable to their end-use in the time allocated*
- *effectively manage resources such as time and money*

Skill: *Communication*

- *generate and share creative ideas from a range of inspirational sources*
- *communicate ideas in various graphical forms*
- *plan and organise related documentation in a folio*

Reflection on Learning Experience ☑

Comment on one or more of the following:

☑ areas of success	☐ areas for improvement	☐ further research

- *Students see the importance of developing a realistic time plan so the task can be finished in the set period of time.*

2.2.6 Teacher activity: Logging employment related skills in the classroom

Using the examples provided in this section:

1. Identify an activity, topic, assignment or unit of work you teach to your students
2. Of the nine employment related skills, tick the ones that you feel students have demonstrated in this activity/topic/assignment/unit
3. Choose three of these skills and describe how each skill has been demonstrated (refer to *5.1 Employment related skills and their elements*)
4. Reflect on students' learning and identify an area of success, of further improvement or further research that you feel students can document.

This is the process that students undertake in documenting their employment related skills in their *Employment Related Skills Logbook.*

Classroom Activity, Topic, Assignment or Unit				
Employment Related Skills ☑				
☐ Self-management	☐ Initiative and enterprise	☐ Learning	☐ Communication	☐ Cross-cultural understanding
☐ Teamwork	☐ Planning and organising	☐ Problem solving	☐ Technology	
Describe how three of these skills were demonstrated *Students can … /Students are able to … /Students know how to …*				
Skill: _____ Skill: _____ Skill: _____				
Reflection on Learning Experience ☑ *Comment on one or more of the following:*				
☐ areas of success	☐ areas for improvement	☐ further research		

3. Student Vocational Learning Activities

"Vocational learning is general learning that has a vocational perspective. It includes elements such as general employability skills, enterprise education, career education and community and work-based learning. All students should experience vocational learning at each year level throughout their schooling."

MCEETYA framework for vocational education and training in schools – policy directions (2001)

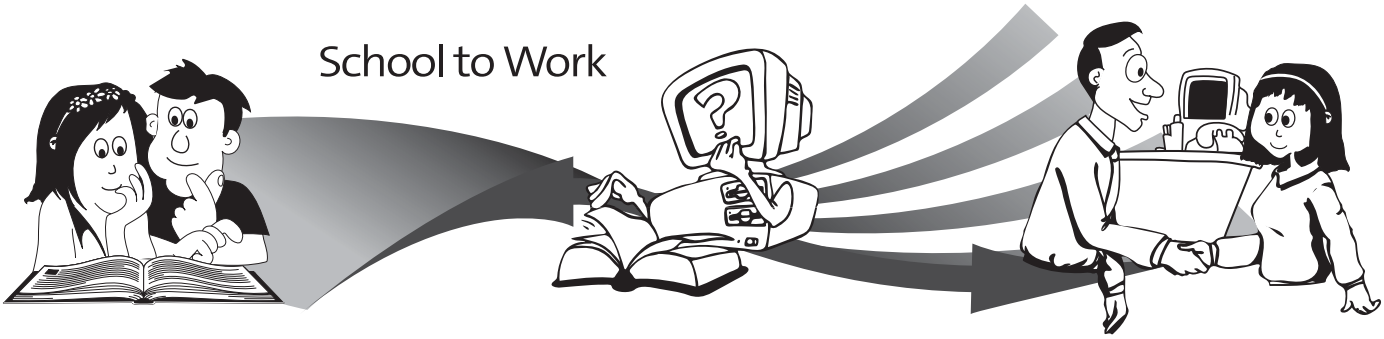
3.1 Technology student activities

Vocational learning is every teacher's business and it should be integrated into everyday teaching and learning. Effective teaching and learning is enhanced by providing access to environments within and beyond the classroom which link student learning to personal, social and work contexts. Students need to have an understanding of the work environment, career options and career pathways, life-long learning and how their employment related skills support both career and life pursuits.

The following pages provide student activities and a teaching unit to support you in incorporating vocational learning in your curriculum. This material has been developed by your colleagues as a starting point for you to create and develop other curriculum activities that support vocational and enterprise learning for your students.

For additional vocational learning activities, please refer to the 2003 edition of *Vocational Learning in Technological and Applied Studies*.

3.1.1 Education and Training Pathways



COMPULSORY EDUCATION YEAR 10

HSC

General and Vocational courses
Vocational Education and Training courses include: TAFE VET and SCHOOL VET and School based part-time traineeships.

credit transfer

TAFE

Year 10
TAFE
entry

UAI

UAI
not as anticipated

No UAI

UAI
not as anticipated

credit transfer

UAI
as anticipated

credit transfer

University linked Course or College

Bridging course alternative entry course/program/ college with direct credit links

Private College

Certificate or Diploma

TAFE

Year 12
TAFE
entry

Certificate or Diploma

Work
plus on-the-job training

EG: Traineeship Apprenticeship or Cadetship

Certificate Diploma or Degree

credit transfer

credit transfer

credit transfer

University

University (Full fee paying)

credit transfer

University Degree

credit transfer

JOB

TRADE

ENTERPRISE

WORK

CAREER

OFFICE

PROFESSION

3.1.2 Education and Training Pathways

FOR A CAREER RELATING TO ***Technology***

Student Activity:

1. Go to the bottom of the page. Write in the name of an interesting job or career that relates to the field of Technology.
2. Write your school subjects in the boxes provided.
3. Refer to the Education and Training Pathways sheet and do some research on courses that may lead to your chosen career.
4. Draw arrows from the subject boxes to map two pathways that lead to this career.
5. Fill in the shaded boxes with the information you find.

MY SCHOOL CERTIFICATE SUBJECTS

_____ _____

_____ _____

_____ _____

_____ _____

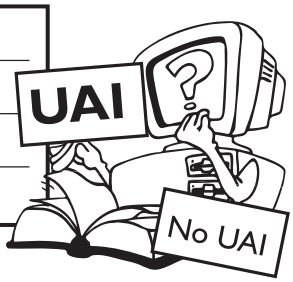
_____ _____

MY HSC COURSES

_____ _____

_____ _____

_____ _____



TAFE

Year 10 entry certificate

Course Name:

Campus:

Private College

Course Name:

College:

University linked Course or College

Course Name:

University linked to:

TAFE

Year 12 or equivalent entry

Course Name:

Campus:

Work plus on-the-job training

Industry:

Training Program:

University

Course Name:

University:

Approximate UAI range:

Prerequisites:

A job or career that sounds interesting to me:

As you can see, there is more than one way to get into any career

3.1.3 Careers research using technology

Career quiz

Do you know what you are good at and really like doing?

- Go to the website given below and complete the on-line career quiz to get some answers!!

www.jobsearch.gov.au/CareerQuiz/careerquiz.aspx

- The checklist will help you find the type of work you like most, and will only take a few minutes to complete.
- Once you have submitted the quiz (by clicking on 'see result'), a graph will display different work interest groups. Record the work group you are most interested in _____
- Click on the link for the highest work interest group and discover some of the 'Occupation Categories' you could be suited to.
- Follow the links to find out about a career that may suit you best.

Careers research

Log on to the website given and use this site to answer the questions below.

www.jobsearch.gov.au/joboutlook

1. How many different job categories are listed on this page?

2. List the job categories that interest you most.

3. Choose two occupations in each category and answer these questions:

   a. What are the weekly earnings (before tax)?

   b. What job prospects are given?

   c. What is the main employing industry?

   d. What is the main age group of workers in this occupation?

   e. What is the unemployment rate in this field?

   f. What is the gender breakdown of males/females in this occupation?

   g. List the tasks that may be included in this type of occupation.

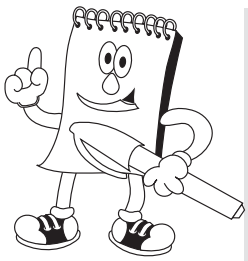
   h. What skill level is required for this occupation?

   i. List some of the other occupations associated with this occupation.

3.1.4 Careers in IT

IT supports every industry in the world – from finance to film and television, law, health, sport, education, government or science.

Whatever area catches your eye, there is an IT career waiting for you.



Some IT career choices include:
Multimedia development, web design, interactive design, instructional design, audio and video production, management, marketing and training, software development, systems analysis, information systems design, programming, multimedia production and development, network development/management/implementation, computer operations, technical support, desktop publishing, business analysis and re-engineering with IT, sales and consulting.

Information on a range of IT occupations can be found at the website:

www.jobsearch.gov.au/joboutlook

Research careers in IT

On the website listed above click on *IT Operations* under the category *Computing and IT*. Then click on *IT Support* and find the graph under *Main Employing Industries (% share)*.

This graph shows some information on one of the many jobs available in the IT field. Use this graph to answer the following questions.

1. What area of IT is the graph describing?

2. How many industries are shown that employ this type of IT personnel?

3. What are the main employing industries?

4. What does this graph tell you about the use of technology in the work place?

5. Which industry employs most IT support personnel?

6. What is the difference between the percentage of IT Support and All Occupations employed by the Property and Business Services Industry?

3.1.5 Food, Hospitality and Tourism

Occupations in this category include:

- Baking and Pastry Cooks
- Butchers and Slaughterers
- Cooks
- Hotel and Gaming Workers
- Kitchen Hands
- Waiters
- Bar Attendants
- Chefs and Wine Makers
- Flight and Travel Attendants
- Hotel, Motel, Club and Restaurant Managers
- Travel Agents and Tour Guides

A variety of important and useful information on the occupations listed above can be found at the website:

www.myfuture.edu.au

Research the Hospitality industry

Log on to the above website:

a) Click on *The Facts* link, then under *Work and Employment* section and click on *Industries*.

b) Type in the word 'Hospitality', use the search result for 'Hospitality' click on 'Related Occupations'

c) Complete the following tasks:

i) List five Hospitality related occupations.

_____ _____ _____

_____ _____

ii) Choose two of these occupations that interest you and, for each one, complete the following questions in the table below:

	Occupation:	Occupation:
General Description of each occupation		
Weekly average earnings of each		
What training is needed in each of these occupations?		
Tasks involved in occupation		
Which occupation has the better prospects for you? Why?		

3.1.6 A Technology career pathway

Go to **www.det.nsw.edu.au/vetinschools/jobsalive/profiles/profilesindex.htm** and find out about some real jobs behind their titles.

There are a number of **Technology** related jobs listed, so choose two that you are interested in and complete the following:

Job 1

1. Job description .....

2. Best bit about the job .....

.....

3. Worst bit about the job .....

.....

4. Pathway to the job .....

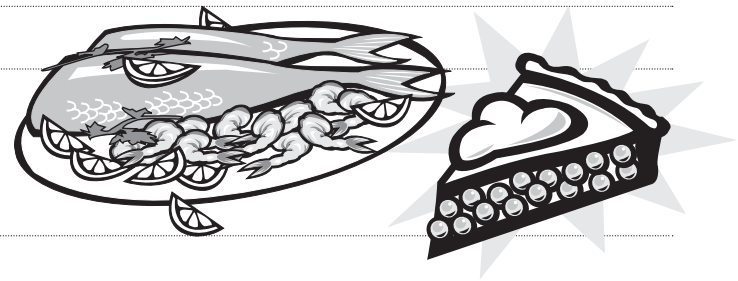
.....

5. Education and training .....

.....

6. Success tips .....

.....



Job 2

1. Job description .....

2. Best bit about the job .....

.....

3. Worst bit about the job .....

.....

4. Pathway to the job .....

.....

5. Education and training .....

.....

6. Success tips .....

.....

If you would like to find out more information about a Technology related career, interview someone who has a career in one of the many Technology areas.

Name: .....

Ask this person to tell you their personal history in the world of work.
Some suggested questions are listed here.

1. How old were they when they got their first job in a Technology related area?

.....

.....

2. Who have they worked for?

.....

.....

3. Has the industry changed much since they started?

.....

.....

4. What is their experience and career path in this industry?

.....

.....

5. What training have they undertaken?

.....

.....

6. Why did they want to get into this job?

.....

.....

7. What interests them most in the industry?

.....

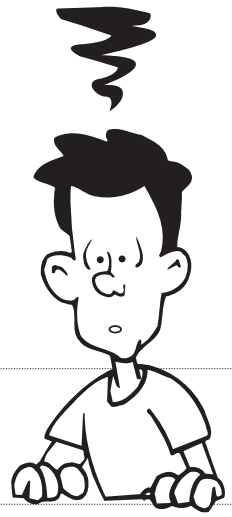
.....

8. What general comments or opinions do they have about a career in ..... **?**

.....

.....

3.1.7 Looking at your own career



As you are probably aware, careers are often a combination of hard work, training and opportunity. It is always important to have goals and focus in your career. This will reward you in the long term and can also make your current schooling more purposeful.

Describe a job in a Technology related area that would most suit you. Use the space provided below.

The title of the job is:

.....

The main things that I would do in this job are:

.....

.....

.....

I would have to develop the following knowledge and skills to be able to do this job:

.....

.....

.....

Look at the list of units or topics in the course overview of the Technology subject/s you are currently studying:

Tick (✓)

❑ Agriculture	❑ Food Technology	❑ Software Design and Development
❑ Design and Technology	❑ Information Processes and Technology	❑ Textiles and Design
❑ Engineering Studies	❑ Industrial Technology	

List the units or topics that will help you to get the job of your dreams:

.....

.....

.....

List any other knowledge or skills that you will need to develop:

.....

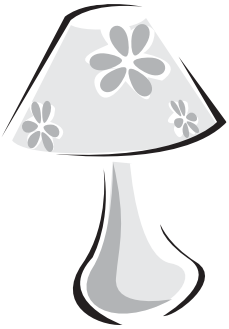
.....

.....

3.1.8 Australian designers at work

Go to **www.powerhousemuseum.com/designersatwork**. Choose one of the designers profiled on this site.

Read through the profile of the chosen designer making sure you access each of the sections listed in the navigation side bar.



a) Make a list of the skills the designer mentions in the sound clip.

.....

.....

.....

b) How did these skills contribute to the designer's success?

.....

.....

.....

c) List 3 skills that you feel would be needed in all occupations.

.....

.....

.....

d) Complete the activities found at the ***Stuff to do*** link.

3.2 Technology teaching unit: Good Food, Good Times

Australian Government
Quality Teacher Programme

Note: This unit of work has been adapted from the unit of work produced by Wendy Duffy at Wauchope High School as part of the *Australian Government Quality Teacher Programme Vocational Learning Project* in 2003.

SYLLABUS: Food Technology	**STAGE AND YEAR:** 5/Year 10
UNIT TITLE: Good Food, Good Times	
SYLLABUS LINK: Food Technology Focus Area – Food for Special Occasions	

UNIT OVERVIEW:

Students will explore a range of special occasions including social, cultural, religious, historical and family and prepare foods unique to specific occasions. Students will plan and prepare safe food, demonstrating appropriate food handling and presentation skills. Students will develop a ***portfolio of catering ideas for their own company***. This portfolio will contain menu suggestions, details of their catering group, and a business card.

A variety of catering events will be explored:

- Small scale – ***a formal dinner party***
- Large scale – ***catering for a school function***
- Special occasion – ***religious celebration***

This unit has explicit links to Vocational Learning in the wide range of employment related skills that are emphasised and developed throughout the unit.

FOCUS SYLLABUS OUTCOMES:

A student:

5.1.1 demonstrates hygienic handling of food to ensure a safe and appealing product

5.2.3 applies appropriate methods of food processing, preparation and storage

5.3.2 justifies food choices by analysing the factors that influence eating habits

5.4.1 collects, evaluates and applies information from a variety of sources

5.4.2 communicates ideas and information using a range of media and appropriate terminology

5.5.2 plans, prepares, presents and evaluates food solutions for specific purposes

5.6.1 examines the relationship between food, technology and society.

3. Student Vocational Learning Activities

Activity Name – *Catering Portfolio*		
Activity Description:	**Resources:**	**Employment Related Skills:**
Develop a catering portfolio that will provide • the details of your catering group • the name of your catering group • a business card for your company • menu sheets for a variety of functions • photographs of prepared food	Sample catering folios from local companies. Classroom log sheet.	Ability to select and prepare food suitable for special occasions (**Planning and organising**) Ability to present food attractively (**Planning and organising**) Communicate ideas and information using the computer (**Communication**) Generate creative ideas for a catering organisation (**Initiative and enterprise**).

Activity Name – *Plan and prepare a small scale catering event – formal dinner party*		
Activity Description:	**Resources:**	**Employment Related Skills:**
Plan a 2 course dinner party menu Design a menu card for the meal Design a workflow plan for the preparation of this meal Draw a plan of the table setting you will use Prepare the food and the table setting Take a digital photo of the presented food product Hand-in for marking: 1. menu card 2. plan for table setting 3. workflow plan	Worksheet on planning your formal dinner party. Classroom log sheet. Workflow Planning activity/assessment sheet.	Plan and write menus (**Planning and organising, Communication**) Identify correct table setting Develop a workflow plan: – ability to identify tasks performed during the preparation of a menu – sequence tasks in a logical and methodical format to ensure productivity and time efficiency – ability to accurately allocate times for each task (**Planning and organising, Problem solving**) Select appropriate pieces of equipment (**Problem solving**) Correctly complete the tasks identified Listen to and follow instructions (**Communication**) Work in a co-operative, equitable and organised manner (**Self-management**) Confidence when dealing with food specific activities Demonstrate safe and hygienic work practices Present an attractive, well presented meal (**Initiative and enterprise, Technology**).

Activity Name – *Plan and prepare a large scale catering event*		
Activity Description:	**Resources:**	**Employment Related Skills:**
Catering for a large scale activity 1. Decide on the occasion: Examples are year group luncheon, School Excellence Assembly, Fundraising Dinner. 2. Decide on a theme, setting and venue. 3. When will it be held: date, time. 4. How many will need to be catered for? 5. Menu: every student should suggest a possible recipe and then the class should vote on which ones would be best. 6. Establish suitable quantities for each selected recipe. Construct a food order. 7. Allocate tasks for the event. Remember workflow is important. Set out a time plan. 8. Organise layout of food, presentation, and table setting requirements. 9. Design and produce a menu to be included in your catering portfolio. 10. Prepare and serve the food. 11. Evaluation of the meal. Did you encounter any problems while organising and planning the meal? Was the workflow helpful? Was there food leftover? Should you have had more food? Were all the recipes successful? How could you improve the meal if you were to do it again?	Worksheet on catering for a large scale event Classroom log sheet.	Demonstrate ability to collaboratively plan, prepare, and present a menu for a specified event (**Planning and organising**) Communicate within a group to establish and achieve goals (**Communication, Teamwork**) Demonstrate safe, co-operative and hygienic work practices Safely use a variety of tools and equipment (**Technology**) Demonstrate the importance of management skills (**Self-management**) Negotiate and work co-operatively in a group (**Teamwork**) Manage and plan activities (**Planning and organising**) Calculate quantities and adjust proportions when modifying recipes (**Problem solving**) Present an attractive, well presented meal Ability to evaluate and identify strengths and areas for development in future practical activities (**Learning**).

Activity Name – *Religious celebration*		
Activity Description:	**Resources:**	**Employment Related Skills:**
• Discuss religious celebrations that are important in Australia • Form class groups and research a religious celebration such as Greek Easter, Christmas, Ramadan, Hanukah etc • Use various ICT to identify – religion – background to celebration – associated ritual – foods – for two dishes for the religious celebration • Investigate – nutritional value – food visual appeal – religious or cultural – consideration • Present findings to the class as an oral and visual presentation • Identify a suitable dish for a class practical activity: – develop a work flow plan – prepare food – plate food, garnishes to enhance a visual appeal.	Worksheet on religious celebration Classroom log sheet.	Communicate with team members to establish and achieve goals (**Teamwork, Communication**) Use a variety of techniques to communicate and present the development of an activity including oral, written and computer software (**Communication, Technology**) Access information and ideas through a range of media (**Planning and organising**) Design solutions to meet identified needs – recognise dietary constraints and plan a menu accordingly (**Problem solving**) Prepare and present a meal according to religious guidelines (**Cross-cultural understanding**).

Logging employment related skills

Students can log employment related skills at the end of each activity or at the completion of the unit Good Food, Good Times. You will find suggestions of appropriate employment related skills listed throughout the unit. A sample Classroom log sheet is featured overleaf for students to use (copies can also be made from the CD provided in the *Employment Related Skills Logbook*).

School to Work

CLASSROOM LOG SHEET

You gain a range of important skills in each subject you study. Identify the employment related skills relevant to your particular classroom activity. Choose up to three skills and describe how you have demonstrated them.

Name		Date		Subject	
Classroom Activity, Topic, Assignment or Unit					
Employment Related Skills ☑					
☐ Self-management	☐ Initiative and enterprise	☐ Learning	☐ Communication	☐ Cross-cultural understanding	
☐ Teamwork	☐ Planning and organising	☐ Problem solving	☐ Technology		
Describe how three of these skills were demonstrated *I can.../ I am able to.../ I know how to...*					
Skill:_____ Skill:_____ Skill:_____					
Reflection on Learning Experience ☑ *Comment on one or more of the following:*					
☐ areas of success	☐ areas for improvement	☐ further research			

4. Education and Training Pathways in Technology

4.1 Credit transfer arrangements

Credit transfer is the granting of advanced standing by institutions (either in the same or a different sector to the original institution) to students on the basis of previous study undertaken in another institution.

4.1.1 Credit transfer arrangements: HSC to TAFE NSW

Credit transfer arrangements negotiated between the NSW Board of Studies and TAFE NSW allows credit for study completed as part of the HSC.

To be eligible for credit transfer in a TAFE NSW course, students need to provide appropriate evidence of previous study or experiences at the time of enrolment. Credit is awarded depending on whether study and experience is relevant to a student's chosen TAFE NSW course.

Successful students will receive advanced standing into their chosen TAFE NSW course and complete fewer modules/units making it possible to achieve a TAFE NSW qualification faster.

Credit transfer does NOT give automatic entry into a TAFE NSW course.

Further information about credit transfer for HSC courses can be found at: **www.det.nsw.edu.au/hsctafe/new**

Note: VET Industry Curriculum Framework Courses (ICFs) are based on units of competency. Students who study VET ICFs need to speak with TAFE NSW enrolling officers for information about the amount of module credit available.

4.1.2 HSC Technology courses and credit transfer arrangements

Students who successfully complete the Technology courses listed below, and who meet the conditions for credit, are eligible to receive credit for specified modules/units in some TAFE NSW courses.

It is recommended that teachers check the website **www.det.nsw.edu.au/hsctafe** regularly as changes to courses and credit transfer arrangements between the HSC and TAFE NSW may occur.

The following information is correct at the time of publication (June 2005).

Technology has credit transfer arrangements with the following TAFE NSW courses:

- 3D Animation and Digital Effects
- Aboriginal Studies
- Access to Work and Educational Opportunities
- Architectural Technology
- Asset Maintenance
- Australian and International Trade Facilitation
- Banking
- Building
- Business (Banking and Finance)
- Cablemaking
- Career Education and Employment for Women (CEEW)
- Ceramics
- Civil Engineering
- Clothing Production
- Communication Skills
- Computer Systems Technology
- Design and Illustration Skills
- Detail Drafting
- Digital Media
- Drafting Trades
- Education Support – School Assistant
- Electrical Engineering
- Electrical Technology
- Electronics Technology
- Engineering
- Equine Massage Therapy

List continues overleaf.

- Event Management
- Events and Entertainment Design
- Fashion Design and Industry Practices
- Forest and Forest Products
- Foundation and Vocational Education
- General and Vocational Education (CGVE)
- Graphic Design
- H.V.A.C – Refrigeration Engineering
- Horse Industry Management
- Hospitality
- Hydraulic Services – Plumbing
- Hydrography
- Irrigation
- Jewellery and Object Design
- Manufacturing Technology
- Marine Craft Construction
- Mechanical and Manufacturing Engineering
- Mechanical Engineering
- Mechanical Technology
- Music
- Music Industry (Business)
- Music Industry (Technical Production)
- Naval Architecture
- Photonics
- Plastics
- Plastics, Rubber and Cablemaking
- Plumbing Technology
- Polymer Technology
- Preparatory Mathematics and Science
- Process Manufacturing
- Process Plant Operations
- Process Plant Technology
- Product Design and Development
- Quantity Surveying
- Racing Administration (Steward)
- Rubber
- Surveying
- Tertiary Preparation
- Textile Design and Printing
- Textiles Clothing and Footwear
- Tourism (Marketing and Product Development)
- Tourism (Operations Management)
- Visual Arts
- Water Industry Operations
- Work Skills.

Engineering Studies has credit transfer arrangements with the following TAFE NSW courses:

- Access to Work and Educational Opportunities
- Agriculture
- Automotive Vehicle Body (Building)
- Cablemaking
- Career Education and Employment for Women (CEEW)
- Civil Engineering
- Detail Drafting
- Detail Drafting and CAD
- Drafting Trades
- Electrical Pre-Vocation
- Engineering
- Foundation and Vocational Education
- General and Vocational Education (CGVE)
- Hydraulic Services – Plumbing
- Hydrography
- Irrigation
- Jewellery Manufacture
- Manufacturing Technology
- Marine Craft Construction
- Mechanical and Manufacturing Engineering
- Mechanical Engineering
- Naval Architecture
- Orthotic and Prosthetic Technology
- Plastics
- Polymer Technology
- Process Manufacturing
- Work Skills.

Information Processes and Technology [Decision Support Systems] has credit transfer arrangements with the following TAFE NSW courses:

- Hydrography
- Information Technology (Internetworking)
- Manufacturing Technology.

Information Processes and Technology [Multimedia Systems] has credit transfer arrangements with the following TAFE NSW courses:

- Aboriginal Studies
- Access to Work and Educational Opportunities
- Broadcasting (Radio)
- Business
- Business Administration
- Career Education and Employment for Women (CEEW)
- Communication and Media
- Communication Skills
- Computer Applications for the Office
- Court and Parliamentary Reporting and Captioning
- E-Business
- English for Vocational Purposes
- Foundation and Vocational Education
- General and Vocational Education (CGVE)
- Hospitality
- Hospitality Management
- Information Technology (various courses)
- Local Government (Governance and Administration)
- Manufacturing Technology
- Mechanical and Manufacturing Engineering
- Media
- Multimedia
- Screen (Art and Construction)
- Sport
- Sport and Recreation

- Tertiary Preparation
- Wholesale Management
- Work Skills.

Information Processes and Technology [Core] has credit transfer arrangements with the following TAFE NSW courses:

- 3D Animation and Digital Effects
- Aboriginal Studies
- Access to Work and Educational Opportunities
- Career Education and Employment for Women (CEEW)
- Detail Drafting
- Digital Media
- Drafting Trades
- English for Vocational Purposes
- Foundation and Vocational Education
- General and Vocational Education (CGVE)
- Industrial Instrumentation
- Information Technology (various courses)
- Local Government (Governance and Administration)
- Manufacturing Technology
- Mechanical and Manufacturing Engineering
- Mechanical Engineering
- Naval Architecture
- Programmable Logic Controllers
- Tertiary Preparation
- Work Skills.

Industrial Technology [Multimedia Industries] has credit transfer arrangements with the following TAFE NSW courses:

- Access to Work and Educational Opportunities
- Career Education and Employment for Women (CEEW)
- Computer Systems Technology
- Electrical Engineering
- Electronics – Trade
- Electronics Technology
- Electronics/Computer Pre-Vocation
- Electrotechnology (various courses)
- Foundation and Vocational Education
- General and Vocational Education (CGVE)
- Manufacturing Technology
- Work Skills.

Industrial Technology has credit transfer arrangements with the following TAFE NSW courses:

- Access to Work and Educational Opportunities
- Career Education and Employment for Women (CEEW)
- Computer Systems Technology
- Detail Drafting
- Detail Drafting and CAD
- Drafting Trades
- Electrical Engineering
- Electrical Technology
- Electronics Technology
- Engineering (various courses)
- Foundation and Vocational Education
- General and Vocational Education (CGVE)
- H.V.A.C – Refrigeration Engineering
- Irrigation
- Manufacturing Technology
- Mechanical and Manufacturing Engineering
- Mechanical Engineering
- Mechanical Technology
- Naval Architecture
- Photonics
- Polymer Technology
- Work Skills.

Software Design and Development [Core] (Recent Software) has credit transfer arrangements with the following TAFE NSW courses:

- Access to Work and Educational Opportunities
- Career Education and Employment for Women (CEEW)
- Foundation and Vocational Education
- General and Vocational Education (CGVE)
- Information Technology (Various courses)
- Tertiary Preparation
- Work Skills.

Software Design and Development [Core] has credit transfer arrangements with the following TAFE NSW courses:

- 3D Animation and Digital Effects
- Aboriginal Studies
- Access to Work and Educational Opportunities
- Career Education and Employment for Women (CEEW)
- Digital Media
- English for Vocational Purposes
- Foundation and Vocational Education
- General and Vocational Education (CGVE)
- Information Technology (Various courses)
- Manufacturing Technology
- Tertiary Preparation
- Work Skills.

Textiles and Design has credit transfer arrangements with the following TAFE NSW courses:

- Access to Work and Educational Opportunities
- Career Education and Employment for Women (CEEW)
- Clothing Production
- Foundation and Vocational Education
- General and Vocational Education (CGVE)
- Textile Design and Printing
- Textiles Clothing and Footwear
- Work Skills.

Credit transfer arrangements for Industry Curriculum Framework courses

Students that have successfully completed a VET industry curriculum framework at school will be eligible to receive recognition from TAFE NSW for individual units of competency and/or AQF qualifications achieved in their course.

The amount of credit received in a specific TAFE NSW course will depend on the individual units of competency achieved in the framework course. Recognition will be granted for whole TAFE NSW modules/units if students have achieved a matching unit or group of units of competency.

More information and advice about the amount of credit students may be eligible to receive is available from a TAFE NSW enrolling officer.

4.1.3 *School Statement of Achievement* forms

Before a student can gain credit for some TAFE NSW course modules/units, a *Statement of Achievement* form is required. Listed below are the new HSC courses that require a signed *Statement of Achievement* form from the course teacher:

- Ceramics CEC
- English
- Industrial Technology
- Information Processes and Technology
- Marine Studies CEC
- Music
- Personal Development, Health and Physical Education
- Photography, Video and Digital Imaging CEC
- Software Design and Development.

All *Statement of Achievement* forms require the signature of the school principal and an official school stamp.

These statements can be downloaded from the TAFE NSW website:

www.det.nsw.edu.au/hsctafe/general/forms.htm

An example of a *School Statement of Achievement* form is shown on the right.

TAFE

HIGHER SCHOOL CERTIFICATE STATEMENT OF ACHIEVEMENT FOR ADVANCED STANDING IN TAFE NSW COURSES

Industrial Technology

Student's Name: _____

School attended: _____

This is to certify that the abovementioned student studied the subject Industrial Technology including the following options which will provide advanced standing in TAFE NSW courses. In meeting the requirements, the student has reached the level of achievement in the HSC examination and school assessment shown on the HSC Record of Achievement.

Industry Focus Area (please tick appropriate box) **Teacher's Signature**

☐ Multimedia Industries (Prelim & HSC) _____

☐ Building & Construction (Prelim & HSC) _____

The abovementioned student has completed a total of _____ (please write) options/topics or strand for this HSC subject.

Principal's signature: _____

Date: _____

School Stamp

4.1.4 Credit transfer from TAFE NSW to university

Students who complete a TAFE NSW diploma or advanced diploma course can apply for an undergraduate university course and may receive credit for subjects in that university course. This may allow students to complete their degree sooner.

Universities have different entry requirements for each course. Entry requirements can vary between universities and between courses. Applicants are considered on a case-by-case basis. Students should contact the university they want to enter for information about specific arrangements.

Further information on credit agreements between TAFE NSW and universities and course information can be found at:

www.sit.nsw.edu.au/courses

www.avcc.edu.au
(Policies and Programs/Teaching and Learning/Credit Transfer/Links with VET)

Note: Students should contact the relevant TAFE NSW institution for credit arrangements with universities and also check the university faculty/school handbook and website for current arrangements and requirements.

Listed below are ***some examples of credit arrangements***. They are a ***guide only*** to help teachers and students understand pathway planning options.

TAFE NSW Course (Sydney Institute)	University	Degree Course	Credit Arrangement
Diploma in Hospitality Management	Western Sydney – UWS	Bachelor of Business (Hospitality Management)	1.5 years credit
Diploma in Civil Engineering	University of Technology Sydney – UTS	Bachelor of Engineering (Civil)	24 to 48 credit points depending on grades obtained in the diploma. To qualify for 48 credit points, all subjects would need to be 'A' passes (48 points corresponds to two semesters or 1 year of the degree course).
		Bachelor of Engineering (Civil and Environmental)	24 to 48 credit points depending on grades obtained in the diploma. To qualify for 48 credit points, all subjects would need to be 'A' passes (48 points corresponds to two semesters or 1 year of the degree course).
Diploma in Information Technology (Website Development)	Macquarie	Bachelor of Computing and Information Systems	Up to 24 credit points of which 9 credit points are specific exemptions for first year units (24 credit points are equivalent to one year of study). Students must also have a strong background in Mathematics.

4.2 Traineeships and apprenticeships

Traineeships and apprenticeships are jobs that combine paid work with formal training in a specific industry/occupation.

Apprenticeships and traineeships are available in most industries including:

- Arts and Entertainment
- Automotive
- Building and Construction
- Community Services and Health
- Communications
- Finance, Insurance and Business Services
- Food Industry
- Forest Industries
- Furnishing, Light Manufacturing, Textiles, Clothing and Footwear
- Manufacturing and Engineering
- Mining
- Primary Industries
- Process Manufacturing
- Public Sector
- Retail and Wholesale
- Sport and Recreation
- Tourism and Hospitality
- Transport and Distribution
- Utilities and Electrotechnology.

Apprenticeships generally last four years and cover traditional trade areas including aircraft, automotive, boat building, bricklaying, cookery, drafting, electrical, electronic, floor covering, green keeping, hairdressing, plumbing, saddlery, sign writing, stone masonry and wood machining. There are more than 100 apprenticeship vocations available in NSW.

Traineeships are offered in over 600 vocations and have been introduced to provide employment and training opportunities in a broader range of industry areas. Traineeships are shorter than apprenticeships, usually 12 months fulltime.

Examples of traineeships that may be of interest to students of Technology include:

Arts and Entertainment: Live Production, Theatre and Events, Film, Television, Radio and Multimedia, Video and Television Production and Music Industry (Technical Production).

Automotive: Automotive Manufacturing, Heavy Vehicle Brakes, Light Vehicle Brakes, Administration, Electrical – Accessory Fitting, Mechanical – Air Conditioning, Mechanical, Vehicle Servicing, Tyre Fitting and Wheel Aligning, Vehicle Body – Detailing, Bicycles, Marine, Outdoor Power Equipment.

Building and Construction: Bridge Construction and Maintenance, Foundation Work, Pipe Laying, Plant Operations, Road Construction and Maintenance, Road Marking, Tunnel Construction, Concreting, Scaffolding, Steel Fixing, Waterproofing, Drainage, Urban Irrigation.

Communications: Information Technology – Business, Client Support, Database Administration, Helpdesk, Multimedia Integration, Multimedia, Network Administration, Network Engineering, Programming, Software Applications, Software Development, Systems Administration, Systems Analysis and Design, Technical Support, Printing and Graphic Arts – Desktop Publishing, Multimedia, Print Design, Telecommunications.

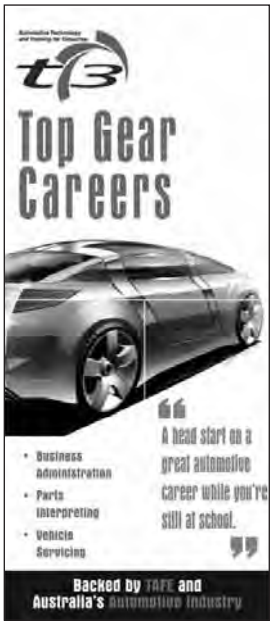
Food Industry: Food Processing, Pharmaceutical Manufacturing, Baking, Wine, Meat Processing – Abattoirs, Boning, Food Services, Quality Assurance, Smallgoods.

Furnishing, Light Manufacturing, Textiles, Clothing and Footwear: Clothing Production, Cotton Ginning, Wool Processing, Footwear Production, Footwear Repair, Blinds and Awnings, Floor Covering and Finishing, Furniture Finishing, Furniture Making, Soft Furnishing Upholstery, Textile Care – Dry Cleaning Operations, Textile Fabrication.

Tourism and Hospitality: Airline Operations, Hospitality, Tourism, Tourism Operations.

Retail and Wholesale: Retail Management, Retail Operations – Buying and Marketing, Customer Service, Store Operations, Retail Supervision, Wholesale Services.

4.2.1 School Based Traineeships in NSW schools



School Based Traineeships provide students with increased opportunities to gain experience and qualifications in a particular industry while still at school.

Students are able to include a recognised VET qualification within their HSC and combine this with paid work.

Students successfully completing a School Based Traineeship receive:

- a nationally recognised VET qualification under the Australian Qualifications Framework
- Certificate of Proficiency
- credit toward the Higher School Certificate.

Generally, during Year 11 and 12, students spend the equivalent of three and a half days a week on their HSC program at school, one day a week in paid employment with their employer and a half day a week undertaking structured training either at school, TAFE or another registered training organisation.

- More information about current NSW traineeships and apprenticeships and School Based Traineeships in NSW schools can be found at the following website: **http://apprenticeship.det.nsw.edu.au/html/schavatrains.htm**
- The Commonwealth Government refers to all traineeships and apprenticeships as new apprenticeships. More information about new apprenticeships can be found at: **www.newapprenticeships.gov.au**
- Further information on School Based Traineeships is available from the Vocational Education in Schools Directorate website: **www.det.nsw.edu.au/vetinschools**

Over 50 traineeships are available for the School Based Traineeship Program. Industry areas include:

- Automotive (T3 – Vehicle Servicing, Parts and Accessories and Business)
- Business
- Electrotechnology
- Engineering
- Process Manufacturing
- Information Technology
- Retail (McDonald's and Big W)
- Telecommunications.

5. Vocational and Enterprise Learning Resources

5.1 Employment related skills and their elements

The employment related skills are as important as job-specific or technical skills. They are generic transferable skills. Students' development of these skills is integral to their ability to fulfil a successful life that incorporates education, work, relationships and recreational pursuits. The elements are the facets of the skills that will help teachers identify when students are demonstrating these skills. The depth and level at which students may demonstrate these skills will vary depending on the expectations of the activities undertaken and the age and experience of the student.

Employment Related Skills	Elements
Self-management – ability to take responsibility for setting and achieving personal goals	***Evidence of self-management can include a range of the following …*** • Setting goals and priorities that balance work and personal life • Monitoring and evaluating performance regarding personal goals • Building and maintaining a positive self-image to enhance confidence • Developing an eye for detail and being precise • Managing change by being flexible, open and responsive • Being proactive in career planning, time management and setting challenges • Managing various aspects of work and personal life, including health and fitness • Learning from mistakes and accepting feedback for continual improvement • Seeking out advice and support when required • Presenting in a manner suitable to the occasion • Developing competence in managing interpersonal and emotional relationships • Understanding, and being able to use, varying means for managing stress and conflict • Understanding the importance of managing time, and having preferred techniques for doing so • Understanding the importance of celebrating success and managing disappointment, and ways of handling these • Matching personal goals and capabilities to an undertaking • Knowing how to deal appropriately with persons in authority • Keeping a focus on the task and outcomes required • Dealing with people, problems and situations with honesty, integrity and personal ethics • Showing interest, initiative and effort • Being socially responsible and contributing to the community • Understanding the importance of reflecting and applying critical judgement • Carrying through an agreed responsibility • Accepting and providing feedback in a constructive and considerate manner.

Employment Related Skills	Elements
Initiative and enterprise – ability to seek/take advantage of opportunities	***Evidence of initiative and enterprise can include a range of the following …*** • Developing a strategic, creative, long term vision and actioning it • Identifying opportunities not obvious to others • Showing independence and initiative in identifying problems, generating a range of options and initiating innovative solutions • Exploring beyond existing boundaries to identify implications and learn from others • Understanding how society, government and business work, and the importance of active citizenship • Understanding what is meant by being enterprising, entrepreneurial and how to develop capacities for these • Understanding how to demonstrate initiative • Ability to manage risk and uncertainty • Willing to take risks and learn from mistakes.
Learning – ability to achieve new skills and/or knowledge	***Evidence of learning can include a range of the following …*** • Willingness to continuously learn and grow in a range of settings, taking into account preferred learning styles • Understanding one's own preferred learning style and working to develop other learning styles • Identifying and accessing learning sources and opportunities • Investing time and effort to acquire new knowledge and technology skills • Assessing personal strengths and areas for development • Exploring and understanding personal creative talents and how to make best use of them • Demonstrating personal and career oriented learning plans • Setting, managing and achieving learning goals • Using a range of mediums to learn – mentoring, peer support, networking, information technology (IT) • Being open to new ideas and techniques • Acknowledging the need to learn in order to accommodate change and build career paths • Being a member of and contributing to a learning community • Understanding the importance of learning new skills and acquiring new knowledge throughout life.

Employment Related Skills	Elements
Communication – ability to express and understand information	***Evidence of communication skills can include a range of the following …*** • Listening effectively and asking questions to understand and appreciate the points of view of others • Writing and speaking clearly, concisely, coherently and directly so others pay attention and understand • Reading and understanding information presented in a variety of forms (eg words, graphs, charts, diagrams) • Recognising the purpose of the communication and the needs of the audience • Sharing ideas and information using a range of information and communication technologies • Using relevant scientific, technical and mathematical knowledge and skills to explain or clarify ideas • Observing and recording data using appropriate methods, tools and technology • Having confidence in personal ideas and vision and being able to articulate these • Speaking and writing in languages other than English • Appreciating and understanding the role of non-verbal communication • Persuading and influencing others by inspiration, sensitivity and clarity • Establishing and using networks, both formal and informal.
Teamwork – ability to work effectively with others to get things done	**Evidence of teamwork can include a range of the following …** • Working as an individual and developing a rapport with others to form working relationships • Recognising and respecting the diversity, individual differences and perspectives of others • Understanding how to operate in a team • Understanding personal capacity for filling different team roles • Identifying the strengths of team members • Understanding how to assist others (eg coaching, mentoring and giving feedback) • Ensuring that the team's purpose and objectives are clear and establishing consensus on individual roles and responsibilities • Influencing, negotiating, collaborating, supervising, directing and motivating others to achieve a recognised objective (demonstrating leadership) • Managing and resolving conflict when appropriate and recognising the role of conflict in a group to identify issues and reach solutions • Understanding how to relate to other people in varying contexts, including those where they manage or are managed by others; and how to get things done • Respecting and being open to and supportive of the thoughts, opinions and contributions of others in a group.

Employment Related Skills	Elements
Planning and organising – ability to coordinate and prioritise tasks and resources	***Evidence of planning and organising can include a range of the following …*** • Developing a vision and a flexible pro-active plan to achieve it • Managing time and priorities – setting timelines, coordinating tasks for self and with others • Allocating people and appropriate tools and technology to tasks or a project • Being resourceful • Developing a range of techniques to locate, gather, assess and organise information using appropriate technology and information systems • Adapting resource allocations to cope with unexpected circumstances • Establishing clear project goals, deliverables and contingencies • Taking initiative and making decisions • Predicting – weighing up risk, evaluating alternatives and applying evaluation criteria • Collecting, analysing and organising information, using appropriate methods, tools and technology • Varying and adjusting one's approach or style according to situation demands • Making estimates and verifying calculations • Participating in continuous improvement and planning processes (monitoring and evaluating) • Evaluating the process and the product.
Problem solving – ability to identify problems and develop solutions	***Evidence of problem solving can include a range of the following …*** • Anticipating, identifying, clarifying and framing problems • Identifying the root cause/s of a problem • Developing and exploring practical solutions • Using mathematics including budgeting and financial management to solve problems • Testing assumptions taking the context of data and circumstances into account • Analysing and assessing information and situations quickly • Generating and using creative ideas and processes • Applying risk management • Seeking different points of view and evaluating them • Recognising the various dimensions of a problem (for example, social, interpersonal, technical and environmental) • Deciding what needs to be measured or calculated • Readily using science, technology and mathematics as ways to think, gain and share knowledge, solve problems and make decisions • Evaluating solutions to make recommendations or decisions • Implementing solutions, then monitoring and evaluating • Maintaining an open mind.

Employment Related Skills	Elements
Technology – ability to use appropriate technologies to complete tasks	***Evidence of technology skills can include a range of the following …*** • Managing and using technology for a purpose in a given context • Having a range of basic information technology skills • Using information technology to manage and organise data • Applying occupational health and safety knowledge and practice to the use of technology • Displaying manual dexterity/fine motor skills when using technology • Applying technology to achieve work and leisure solutions • Achieving competence in handling information and communications technology and understanding the underlying processes • Understanding the social and ethical implications of technology and critically evaluating them • Being aware of technical challenges and constraints and having a plan for solving them • Understanding the role of technology in leisure and work • Understanding the implications of technology for productivity and business competitiveness.
Cross-cultural understanding – ability to respect diversity and act without discrimination	***Evidence of cross-cultural understanding can include a range of the following …*** • Recognising, valuing and respecting cultural, religious, linguistic and community diversity in local, national and global contexts • Identifying opportunities to use diversity to achieve agreed outcomes • Working effectively with people of diverse cultural, religious and linguistic backgrounds • Demonstrating an appreciation of the rights and responsibilities of individuals, groups and organisations within local, national and global contexts • Identifying how individuals and groups are interdependent on each other • Demonstrating sensitivity when interacting with individuals and groups from diverse cultural, religious and linguistic backgrounds • Working with others to achieve common goals which reflect equity and social justice • Recognising Australia's Indigenous heritage and its political, social, economic and cultural relevance • Identifying and overcoming stereotypes in life and work.

Personal attributes Personal attributes contribute to overall employability. They are a set of non-skill-based behaviours, attitudes and characteristics that contribute to a person's ability to achieve a successful life.	**Enterprise Education Learning Framework**	
	Key Qualities The enterprising learner is …	**Enterprising Characteristics** The enterprising learner …
• **Loyalty** • **Commitment** • **Honesty and integrity** • **Empathy** • **Assertiveness** • **Trust** • **Enthusiasm** • **Reliability** • **Personal presentation** • **Common sense** • **Positive self-esteem** • **A sense of humour** • **A balanced attitude to work and home life** • **An ability to deal with pressure** • **Motivation** • **Adaptability** • **Flexibility** • **Resilience** • **Determination** • **Self-reliance** • **Flexibility** • **Engagement** • **Connectedness**	**Connected**	• takes action that links learning to the real-world • communicates effectively • participates in the community.
	Engaged	• makes a head and heart contribution • is task oriented and outcomes focused • applies understanding to move forward • manages resources and time effectively.
	Resilient	• takes advantage of opportunities • actively monitors and responds to feedback • maximises capability and responds appropriately to setbacks.
	Responsible	• takes responsibility for own actions • has a sense of self-worth and belonging.
	Ethical	• contributes to the development of community values • acts in accordance with agreed values.

5.1.1 Employment related skills mapping

The table below maps the employment related skills (2005) against the employment related skills used in the *Employment Related Skills Logbook* (2002-2004) and the *Key Competencies* addressed in all NSW syllabuses.

NSW Employment Related Skills for Years 9-12 (2005)	Previous NSW ERS for Years 9 & 10	Previous NSW ERS for Prelim & HSC	Mayer Key Competencies
Communication *Ability to express and understand information*	Communication	Communicating ideas and information Negotiating and influencing	Communicate ideas and information Using mathematical ideas and techniques
Planning and organising *Ability to coordinate and prioritise tasks and resources*		Planning and organising Collecting, organising and analysing information Recruiting and managing resources	Planning and organising activities Collecting, analysing and organising information Identifying, assessing and managing risks
Teamwork *Ability to work effectively with others to get things done*	Leadership	Working with others and in teams	Working with others and in teams
Technology *Ability to use appropriate technologies to complete tasks*	Technological Physical		Using technology
Problem solving *Ability to identify problems and develop solutions*	Numerical	Solving problems	Solving problems
Learning *Ability to achieve new skills and/or knowledge*			
Self-management *Ability to take responsibility for setting and achieving personal goals*	Social	Matching personal goals and capacities to undertakings Monitoring and evaluating Being flexible and dealing with change	
Initiative and enterprise *Ability to seek/take advantage of opportunities*	Creative Practical	Using initiative and drive Generating and using creative ideas and processes Generating, identifying and assessing opportunities	
Cross-cultural understanding *Ability to respect diversity and act without discrimination*			Cultural understanding

5.2 Vocational learning resources for teachers and students

The following resources may be helpful to teachers and students who research careers and courses. Teachers and students may collect and add additional resources to this list.

Handbooks

- The most recent NSW DEST Job Guide **www.jobguide.dest.gov.au**
- The most recent version of the NSW UAC Guide **www.uac.edu.au**
- The most recent version of the TAFE NSW HANDBOOK **www.tafensw.edu.au**
- The most recent version of the HSC/TAFE Credit Transfer Guide **www.det.nsw.edu.au/hsctafe**
- The careers section of the most recent local/state newspaper.

Note: Schools located near other states should explore interstate handbooks.

Booklets

- *Aboriginal Career Aspirations Program*, Board of Studies. Distributed to schools 2002
- *Making Choices* (Work Sheets and CD-ROM) Career Education Association of WA.

Multimedia

Resource Title	Description
Logging The Real Game in NSW Schools – CD-ROM	This CD-ROM has been developed for teachers to help students identify and record their employment related skills acquired through participation in *The Real Game.* This is achieved by connecting *The Real Game* with the *School to Work Employment Related Skills Logbook* and shows how these two resources complement each other. *Logging The Real Game in NSW Schools* includes a series of support materials provided on CD, which allows both students and teachers to reflect on the outcomes achieved.
Logging on to the Future – CD-ROM	This resource promotes the usefulness of the *Employment Related Skills Logbook* to students, teachers, parents and employers. It demonstrates how the documenting of vocational skills by students throughout their school years can support them in interviews and applications.
School to Work Training 2003 – Video	The presenter, Paul Baker from TMP Worldwide, provides current information about the changing nature of the workplace, trends in employment and how this impacts on society. He focuses on the skills and competencies that will be required in future workplaces and then demonstrates how schools can help equip students to be better placed to meet the new and emerging world.

Resource Title	Description
JUMP TO IT: your guide to careers in the Sport and Recreation industry – CD-ROM	This resource covers the four sectors in the Sport and Recreation industry; community recreation, fitness, outdoor recreation and sport. It provides advice to students on steps they can take to research the Sport and Recreation industry and activities they can undertake to test their commitment and interest. A brief background to employment prospects and a profile on business people in the industry is supported by links to appropriate websites.
PowerUp – Your Career in Utilities and Electrotechnology – CD-ROM	This is an interactive, multimedia CD-ROM filled with information on today's Utilities and Electrotechnology industry opportunities. It profiles different workers in the industry and provides insight into their work and training. It incorporates video footage, sound and stills (graphics, photos), and text descriptions of the industry sectors being case studied, as well as links to other information, regarding employment opportunities and training.
WRAPS Careers: What Do You Want To Be? – Video	The aim of *WRAPS Careers: What Do You Want To Be?* is to provide careers advisers, VET teachers and students with information about careers in the Wholesale, Retail and Personal Services industries.
You Can Do I.T. ICT Careers Expo – Video	This video was filmed at the Information and Communication Technology (ICT) School to Work Information Day 2002. It provides Government school secondary students, careers advisers and parents with a range of available career and training options and current industry trends in the ICT field. The video also features interviews with students and ICT personnel in their workplace.
It's Your Business – DVD	This is a DVD resource for students who think that one day they might like to run their own business. It features: • video footage of four young people who are making it, working for themselves. They explain how they did it, the training they had and who helped them • an info bank with advice on how to get started, how to run a business and how to make it grow • quizzes to test individual suitability for business and the dos and don'ts.
Make It in Metal – CD-ROM	This CD-ROM provides information for people considering a career in the Metal Manufacturing and Engineering industry. It is suitable for use with students undertaking research or as a classroom resource. *Make It in Metal* allows students to meet young people in their workplaces, explore different industry pathways, test their knowledge about access to organisations and resources and learn about jobs.
Welcome To Hospitality – CD-ROM	This CD-ROM looks at a sample of the huge number of jobs that make up the hospitality industry, represented here by the hotel, motel, pubs, clubs and restaurant sectors.
Automotive Careers – CD-ROM	This CD-ROM resource provides information to students on a variety of automotive careers through text, video and still pictures. It is sectioned into the areas of Body Repairs, Mechanical Repairs, Sales and Careers.

Useful websites

www.curriculumsupport.nsw.edu.au/technology
Technology homepage of the Curriculum K-12 Directorate. Contains links to resources suitable for teachers of technology subjects.

www.powerhousemuseum.com/designersatwork
Australian designers at work is a collaborative project between the Technology Unit, Curriculum K-12 of the NSW Department of Education and Training and the Powerhouse Museum. It has been developed as an online resource for students and teachers of Technology Stage 4 (Mandatory) and was funded by the Vocational Education in Schools Directorate.

www.hsc.csu.edu.au
Information for students on Technology Stage 6 subjects. Go to the specific subject and select the careers button (located top left-hand corner of page).

http://getaccess.westone.wa.gov.au/izone/career-game
Access the website to play the career game. This game is designed to help you gain an understanding of yourself and the career planning process.

www.tgmag.ca/byws/dash.htm
Using this website, click on one of the three characters to make the daily dash and discover the skills you acquire each day.

www.det.nsw.edu.au/vetinschools
The Vocational Education in Schools Directorate has developed this website for teachers, parents and students to provide information on and links to vocational education.

www.myfuture.edu.au
Australia's electronic career information service.

www.det.nsw.edu.au/vetinschools/schooltowork
Designed for teachers, this website supports the NSW Government's *School to Work Program*.

www.futurefinder.com.au
This website has a career interest test.

www.newapprenticeships.gov.au
A national website for traineeships and apprenticeships. This site contains the most up-to-date information on new apprenticeships including new apprenticeship centres in your region.

http://apprenticeship.det.nsw.edu.au
The Department of Education website lists up-to-date information and statistics on traineeships and apprenticeships in NSW.

www.seek.com.au
One of Australia's leading student and graduate employment and career resource websites, it contains over 35,000 jobs online. Do a 'quick job search' by typing a Technology subject or course as a keyword and discover a plethora of jobs available requiring technology skills.

www.workplace.gov.au
'Australian Workplace' offers information on employment, workplace relations, government assistance, jobs, careers, training and wages. It links to **www.jobsearch.gov.au /joboutlook** which contains occupational information such as job prospects and weekly earnings.

www.boardofstudies.nsw.edu.au
This website includes details of the Board of Studies Technology curriculum.

www.det.nsw.edu.au
The Department of Education and Training has a 'Training and Industry' link to BVET, Apprenticeships NSW, VETAB, industry programs, training market and new apprenticeship centres.

www.det.nsw.edu.au/vetinschools/jobsalive
The *Jobs Alive* website enables students to read about the career pathway of a profiled worker. The site contains a photo of each worker when they were in Year 10. This helps students better understand that these workers were once their age facing similar decision-making issues.

http://girlswork.det.nsw.edu.au
The site looks at some different jobs in the form of Work Profiles, shares stories of other young women in *Your Stories* and discusses the different paths you can take between education, training, work and careers in *Pathways*. It helps young women explore their options using a variety of material including e-cards, a quiz, news and lots of links.

http://boyzatwork.det.nsw.edu.au
This website explores the broad range of work and career options available to young men. The *Champions* section has interviews with successful young men, *Jobz 4 the Boyz* looks at a number of jobs and careers that young men may not have considered and *Steer Your Career* shows there is more than one way to get from education and training to work and a career. Young men can consider their education, training and employment options by exploring this website and engaging in the quiz, e-cards, news and lots of links.

www.tafensw.edu.au/nsit/nsijobsforthegirls
This website displays images of eight young women in their workplace. The website has a case study on each of the eight young women that details their path into their chosen career. Better jobs and better pay means confidence and financial independence. The website hopes to interest young women in studying courses that will give them the skills and qualifications they need to pursue their career.

5.2.1 *myfuture.edu.au*

The *myfuture* website is a unique, comprehensive, online career information exploration service which is useful for school students and young people making decisions about subject choice, vocational pathways and employment.

The website allows users to refine their career ideas and to explore the skills and qualifications necessary for their desired career path. Information on awards, scholarships and financial assistance for study is also provided to enable users to shape their educational future.

As young people plan their transition from study to work, further education and employment, they can use *myfuture* to explore their interests and acquired skills and discover a variety of relevant career options. Some of these options may be completely new to them. *myfuture* also has information about the labour market, employment conditions and income data for any region of interest throughout Australia.

The detailed occupation descriptions in *myfuture* are very popular with young people. Young people can be better prepared for the workforce knowing what skills are required and what responsibilities and income to expect in particular jobs and careers. This can directly benefit employers, as new employees will have a higher level of confidence that the job they select is right for them.

Enterprising young people interested in identifying business opportunities and wanting to find out more about setting up a small business are also supported on the *myfuture* website.

For teachers, this website complements vocational learning activities in the classroom and is an innovative technological tool for students to explore career options relating to the eight key learning areas. The *Employment Related Skills Logbook* also features an introductory task to the *myfuture* website in the Student section.

With *myfuture*, career planning and development goes beyond the traditional tasks of selecting an occupation, getting a job, progressing in a single occupational field and planning for retirement. Articles and activities in *myfuture* include life planning and emphasise self-awareness, life long learning, career self-management and lifestyle management. Now go to **www.myfuture.edu.au** and explore the possibilities for yourself.

myfuture
Australia's career information service
myfuture.edu.au

5.2.2 *The Real Game Series*

The Real Game series consists of five developmentally sequenced career development and life skills programs. Each program in *The Real Game* series is a stand-alone teaching and learning tool which addresses the *K-10 Curriculum Framework* broad learning outcome: *Students will understand the work environment and have the knowledge, skills and understandings to evaluate potential career options and pathways.* The programs also encourage contemporary assessment for learning practices, provide student personalised learning opportunities and support quality pedagogy.

Each program includes creative role-playing and simulated activities. As a result, students have fun as they learn about life as an adult, exploring life and work roles in the context of their own career development and life planning. The five programs include:

The Play Real Game	suitable for ages 8 – 10
The Make It Real Game	suitable for ages 10 – 12
The Real Game	suitable for ages 12 – 14
The Be Real Game	suitable for ages 14 – 16
The Get Real Game	suitable for ages 16 – 18

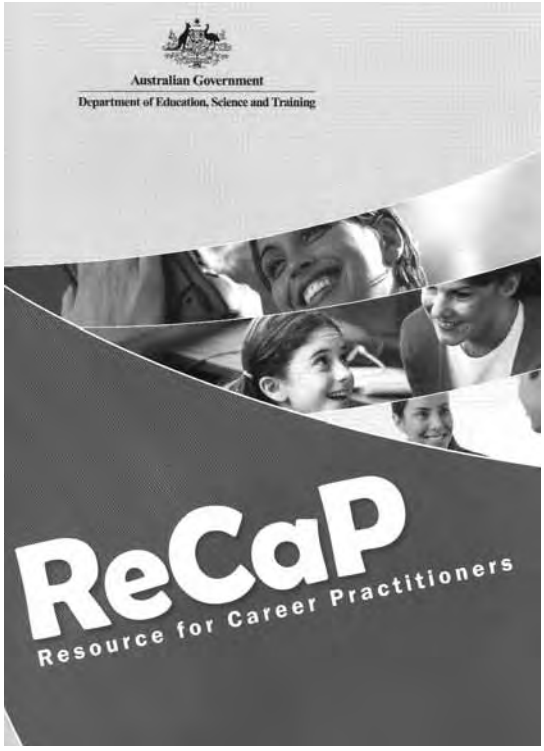
The Real Game series is underpinned by five internationally acknowledged career development themes known as the *High Five*, which have recently been incorporated into the draft prototype of the *Australian Blueprint for Career Development*. These principles are:

- **Focus on the journey**, not the destination
- Know yourself, believe in yourself and **follow your heart**
- You're not alone. **Access your allies**, and be a good ally
- **Change is constant**, and brings with it new opportunities
- **Learning is lifelong**, and it's good. We are most alive when we are learning.

A CD-ROM entitled *Logging the Real Game in NSW Schools* has been developed for teachers to help students identify and record their employment related skills acquired through participation in *The Real Game*. Other features of this resource include: *The Real Game* log sheet and the employment related skills certificate. The sessions and units of *The Real Game* have been mapped against the objectives and outcomes of Stage 4 NSW Board of Studies Commerce, English, Maths and PDHPE syllabuses to show how the program can address course delivery needs across a range of key learning areas.

To access the required teacher training or for more information on *The Real Game* series or *Logging the Real Game in NSW Schools*, contact your Vocational Education Consultant. For more general information about the series or to order products visit the Australian Real Game website: **http://realgame.dest.gov.au**

5.2.3 *Links to ReCaP*



ReCaP (Resource for Career Practitioners) is a quality teacher initiative under the *Australian Government Quality Teacher Program*. The resource provides careers advisers with information about current theories and policies relating to career development. It also provides the most up-to-date information about national programs, resources and materials, and has sections to enable users to include state, local and personal content. *ReCaP* was distributed to all NSW careers advisers in 2004.

The resource contains a series of student activities as black line masters for photocopying. A CD-ROM is also included with electronic versions of all worksheets that allow teachers to customise them to suit individual student needs. Worksheets can also be stored on a school's intranet.

The activities are aligned with the sections covered in the *Employment Related Skills Logbook* and would enhance students' entries and use of the logbook. The set of employment related skills outlined in *ReCaP* align with those listed in the logbook.

ReCaP can be downloaded from the following website: **www.dest.gov.au**

Home>Career Development>Publications & Resources>Publications A-Z>R>ReCaP:resource for career practitioners**.** Scroll down to Availability and click on HTML.

5.3 Enterprise resources and activities

For more information on enterprise activities and programs that students may wish to participate in, visit the websites listed below.

www.schools.nsw.edu.au/events/statecompetitions/webawards

The Department of Education and Training's Annual Schools Web Design Awards encourage teachers and students to become familiar with web design tools and to immerse themselves in communication technologies. Entering the awards is an excellent way of involving your school in these technologies. The competition is a fantastic way for students to create an educational resource for a world wide audience.

www.curriculumsupport.nsw.edu.au/technology/myda

The Minister's Young Designer Awards (MYDA) promotes innovative Stage 4 Design and Technology. The MYDA encourages students to look at the world around, to investigate products, systems and environments, and to design a successful solution in an area of interest to them. The awards are open to students in Years 7 and 8 in Government and non-Government schools in NSW, either as individual entries or as small group (maximum of six) entries. The challenge offered to students is to develop a project that meets a clearly identified need.

www.mindshop.com.au/mswebpage.nsf/pages/excellence

Mindshop Excellence is a five day work experience program aimed at Year 10 students. A team of six students will visit a host organisation. Facilitators will train students in business processes. Students will then be given a real workplace issue to solve over the course of the five days. The team will present their solution to management, staff, parents and teachers.

www.youth2youth.com.au

Youth 2 Youth run skill based workshops in school or outside school that equip young people with career, enterprise and business skills. They develop two free publications, *Frank* for young women and *Ignite* for all youth – they highlight opportunities, list contacts and provide inspiration for enterprising young people. The site provides youth information and hotlinks to many other sites.

www.anpf.cit.act.edu.au

Australian Network of Practice Firms. A practice firm is a virtual business set up and run by students with support from teachers and a mentor business partner. Practice firms trade in a virtual economy with other practice firms in the network and can attend and participate in trade fairs at a local, regional, state and national level.

www.takethechallenge.com.au

Energy Australia Red Cross Youth Challenge invites young people, their teachers and members of the community to take the challenge by finding a project that helps the community. Groups work together on a project gaining skills in project management, problem solving, research and communication. The site lists available projects or students can come up with their own.

www.sustainableliving.com.au

Sustainable Living Competition is an annual competition for high school students to undertake environmental projects in the classroom individually or by entire school communities. More than $30,000 in prizes.

www.yaa.org.au

Young Achievement Australia (YAA) offers two programs. Business Skills is aimed at Year 11 students. Groups of 20 to 25 students run their own business under the mentorship of a host organisation and take responsibility for all decisions. The program is run over 16 to 24 weeks generally outside school hours. Students can achieve a Certificate II in Business. Business Enterprise is for Years 8-10 students and introduces them to the world of business. Generally conducted in Commerce, Business or Work Education classes.

5. Vocational and Enterprise Learning Resources

www.asx.com.au/sharegame

ASX Schools Sharemarket Game is available to students in Years 7-12. Students form a syndicate of two to four students. Each syndicate is provided with an imaginary $50,000 to invest in shares. This hands on experience of the share market will see you involved in internet "share trading" over a 10 week period.

www.austrade.gov.au/studentcentre

Austrade Export Plan Competition is a five week hands on unit where students study business with global potential. Students can apply business, economic and marketing theory and consider the global potential and small business opportunities in their own local area.

www.abw.org.au

Australian Business Week (ABW) offers students several programs. The in-school program is an intensive five day program (involving all Year 10 or 11) where groups of 10 students form a simulated company and assume the key roles of that company's employees. This culminates in the production and marketing of a product at a trade fair.

www.csiro.au/crest

CREST (Creativity in Science and Technology) provides students with a nationally accredited award for completing science or technology research projects. Projects are offered at different levels. Links are made with industry or community workers so students gain an understanding of the role of science and engineering in the community.

www.enya.org.au

The Enterprise Network for Young Australians (ENYA) promotes the active participation of young people (aged 15-30) in enterprise in an ethical and sustainable manner. It can assist them to set up their own enterprise by directing them to funding opportunities, mentors and training. ENYA has links to many other sites targeting youth.

www.govolunteer.com.au

Go Volunteer provides young people with all the information necessary if they are considering volunteering or seeking volunteer opportunities in their local area.

www.youthgas.com.au/about

Youthgas provides timely and accessible youth information/opportunities, a space for younger voices to be expressed and a place for people to share and learn about issues and concerns.

www.youngaustralians.org

The Foundation for Young Australians is committed to developing innovative initiatives that support and empower the lives of young Australians aged 12-25. They provide seed funding and help young people develop their ideas.

www.myownbusiness.org

My Own Business site is a free Internet business course on starting up and operating your own business. It offers resources, forum and chat, various courses and helpful information geared toward successful business.

www.highschoolstartups.com

High School Start Ups is designed to encourage enterprising young people. It provides useful information for students thinking about establishing their own business or a partnership business.

5.4 *Teachers in Business* – an opportunity for teachers

The *Teachers in Business Program* (TIB) provides teachers with work opportunities outside of school that will enhance their own industry/business experience and vocational learning. It will allow teachers to add value to curriculum delivery as they transfer the knowledge and skills learnt during the placement back into the classroom. It is also a means by which teachers can forge valuable links to industry for their school.

All teachers K-12 are eligible to apply for this program. Teacher relief is available to support teacher placements during school time. Teachers negotiate their placement with a suitable organisation or are 'matched' with the support of industry.

Teachers need to clearly outline how the placement will enhance their teaching. Examples include:

- Project management for leadership roles
- Business organisation
- Career pathways in a business or industry
- Examining new and emerging technologies in a specific industry area
- Event management that will assist in planning school or local events
- Examining ways in which industry and school can work together
- Examining services available to students when they leave school
- Investigating a range of support services for students with special needs
- Working with practice firm business mentor.

Teachers will be required to share their learning with others at the school, local or regional level.

Contact your local Vocational Education Consultant for the Guidelines and Application form.

Notes